City of Charlotte Disparity Study 2022







CITY OF CHARLOTTE DISPARITY STUDY

2022

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About the Study Team

Colette Holt & Associates ("CHA") is a national law and consulting firm specializing in issues related to Minority, Women and Disadvantaged Business Enterprise programs, business diversity initiatives, and affirmative action issues. The firm has conducted court-approved disparity studies and designed court-approved programs for over 30 years, including for numerous governments. CHA also provides training, monitoring and investigative services across the country to agencies and businesses. CHA is led by Colette Holt, J.D., the founding principal of Colette Holt & Associates and a nationally recognized attorney and expert. Ms. Holt is also a frequent expert witness, and a media author, on these issues. In addition to Ms. Holt, the firm consists of Steven C. Pitts, Ph. D., who serves as the team's economist and statistician; Ilene Grossman, B.S., Project Administrator; Glenn Sullivan, B.S., Director of Technology; Victoria Farrell, MBA, Director Qualitative Data Collection; and Joanne Lubart, J.D., Associate Counsel.

Paradigm 360° Consulting, LLC (SBE) specializes in authentic community engagement in corporate, government, and non-profit sectors. The firm assisted CHA with anecdotal data collection and community engagement.

Apex Business Group LLC (MBE) assists small businesses, corporations, and other entities to expand their reach. Their services include marketing, advertising, consulting, and creating and coordinating outreach programs in the Charlotte area. The firm assisted CHA with anecdotal data collection and community engagement.

Viridian Marketing (WBE) focuses on creative development and branding strategies. The firm worked with CHA to develop a dedicated study website and create social media strategies for community engagement and outreach.

Acknowledgments

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I. EXECUTIVE SUMMARY

Colette Holt & Associates ("CHA") was retained by the City of Charlotte ("City") to perform a disparity study examining its Minority-owned Business Enterprise ("MBE") and Woman-owned Business Enterprise ("WBE", collectively, "M/WBE") Program. In this Study, we determined the City's utilization of M/WBEs during fiscal years 2015 through 2020; the availability of these firms as a percentage of all firms in the City's geographic and industry market areas; and any disparities between the City's utilization of M/WBEs and M/WBE availability for City contacts. We further analyzed disparities in the Charlotte Metropolitan Area and the wider North Carolina economy, where race-conscious or gender-conscious procurement programs are uncommon, to evaluate whether barriers continue to impede opportunities for minorities and women when remedial intervention is not imposed. We also gathered qualitative data about the experiences of M/WBEs in obtaining City contracts and associated subcontracts. Based on these findings, we evaluated the M/WBE Program for conformance with constitutional standards and national best practices.

The methodology for this Study embodies the constitutional principles of *City of Rich-mond v. J.A. Croson Co.*,¹ Fourth Circuit Court of Appeals case law, and best practices for designing race- and gender-conscious programs. The CHA approach has been specifically upheld by the federal courts. It is also the approach developed by Ms. Holt for the National Academy of Sciences that is now the recommended standard for designing legally defensible disparity studies.

A. Summary of Strict Constitutional Standards Applicable to the City of Charlotte's M/WBE Program

To be effective, enforceable, and legally defensible, a race-conscious program for public sector contracts must meet the judicial test of constitutional "strict scrutiny". Strict scrutiny is the highest level of judicial review. The City of Charlotte must meet this test to ensure any race-conscious and gender-conscious program is in legal compliance.

Strict scrutiny analysis has two prongs:

1. The government must establish its "compelling interest" in remediating race discrimination by current "strong evidence" of the persistence of discrimination. Such evidence may consist of the entity's "passive participation" in a system of racial exclusion.

^{1. 488} U.S. 469 (1989).

2. Any remedies adopted must be "narrowly tailored" to that discrimination; the program must be directed at the types and depth of discrimination identified.²

The compelling governmental interest prong has been met through two types of proof:

- 1. Statistical evidence of the underutilization of M/WBEs by the agency and/or throughout the agency's geographic and industry market area compared to their availability in the market area.
- 2. Anecdotal evidence of race-based or gender-based barriers to the full and fair participation of M/WBEs in the market area and in seeking contracts with the agency. Anecdotal data can consist of interviews, surveys, public hearings, academic literature, judicial decisions, legislative reports, and other information.

The narrow tailoring prong has been met by satisfying five factors to ensure that the remedy "fits" the evidence:

- 1. The necessity of relief;
- 2. The efficacy of race-neutral remedies at overcoming identified discrimination;
- 3. The flexibility and duration of the relief, including the availability of waiver provisions;
- 4. The relationship of numerical goals to the relevant market; and
- 5. The impact of the relief on the rights of third parties.

The Disadvantaged Business Enterprise ("DBE") program for United States Department of Transportation funded contacts has been evaluated under a similar framework. The program regulations were first revised in 1999 to meet the new test imposed by the US. Supreme Court in *Adarand Constructors, Inc. v. Peña*.³

Most federal courts, including the Fourth Circuit, have subjected preferences for WBEs to "intermediate scrutiny".⁴ Gender-based classifications must be supported by an "exceedingly persuasive justification" and be "substantially related to the objective".⁵ The quantum of evidence necessary to satisfy intermediate scrutiny is less than that required to satisfy strict scrutiny. However, appellate courts have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program or held that the results would be the same under strict scrutiny.

^{2.} City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989).

^{3. 515} U.S. 200 (1995).

^{4.} *H.B. Rowe*, 615 F. 3d 233, 242 (4th Cir. 2010).

^{5.} *Cf. United States v. Virginia*, 518 U.S. 515, 532 n.6 (1996).

Proof of the negative effects of economic factors on M/WBEs and the unequal treatment of such firms by actors critical to their success will meet strict scrutiny. Studies have been conducted to gather the statistical and anecdotal evidence necessary to support the use of race-conscious and gender-conscious measures to combat discrimination. These are commonly referred to as "disparity studies" because they analyze any disparities between the opportunities and experiences of minority-owned and woman-owned firms and their actual utilization compared to White male-owned businesses. Specific evidence of discrimination or its absence may be direct or circumstantial and should include economic factors and opportunities in the private sector affecting the success of M/WBEs. High quality studies also examine the elements of the agency's program to determine whether it is sufficiently narrowly tailored.

B. The City of Charlotte's Minority-owned and Womanowned Business Program

1. Governing Statutes, Policy and Objectives

In 1993, the City of Charlotte adopted a program to remedy discrimination and encourage the growth of local businesses. The overall program encompasses both race-neutral and race-conscience elements and is designed to promote economic development and to enhance participation by small businesses, minorities and women in City contracts.⁶

A disparity study conducted in 2017 led to the adoption of the current Charlotte Business INClusion ("CBI") Program. The CBI Program Policy sets forth program coverage, requirements, policy and procedures. This Policy was most recently amended in 2020.

2. CBI Program Administration

The Charlotte City Manager, the CBI Program Manager, City department directors and the City Attorney's Office collectively administer the CBI Program. The Program Manager manages the CBI Program Office and the daily operations of the Program. The CBI Office is staffed with 10 employees, inclusive of the Program Manager. The Program Manager has the authority to adopt rules, guidelines and processes to implement the Program. This authority extends to establishing, recommending, and monitoring MWSBE contracting goals and commitments; overseeing CBI policy and procedural compliance; conducting

^{6.} The Small Business Enterprise ("SBE") Program is authorized by North Carolina General Assembly S.B. 1336 and Section 8.88 of the Charlotte City Charter. The Minority and Woman Business Participation Program is governed by North Carolina General Statutes 143-128.2, 143-128.1, 143-128.4 and 143-13.

outreach, training and advocacy to encourage participation in contracting opportunities; and developing partnerships and initiatives to foster economic development of small businesses; tracking and reporting of CBI Program data and results to measure the success of the CBI Program; and issuing reports that identify key achievements and challenges of the Program.

3. CBI Program Eligibility Standards and Certification

The Program provides for two classes of firms for eligibility: M/WBEs; and Small Business Enterprises ("SBEs"). M/WBE firms must be certified with the State of North Carolina's Historically Underutilized Business ("HUB") Office. MBEs must be at least 51% owned by one or more persons who are, African American/Black, Hispanic, Asian, or Native American/American Indian. WBEs must be at least 51% owned by one or more persons who are female.

The City of Charlotte has defined its own criteria for SBE eligibility. A firm must be a for-profit enterprise, authorized to do business in the State of North Carolina; meet the SBE size eligibility of less than 25% of the applicable size standards set by the Small Business Administration at 13 C.F.R. § 121.201; have a personal net worth under \$750,000, excluding \$500,000 of equity in a primary residence; demonstrate that at least 51% of the legal and equitable interest in the business enterprise is owned and controlled by eligible owners who acquired the interest in the firm with their own financial or equivalent resources; and hold a professional business license for each type of business in which it is seeking certification.

M/WBEs and SBEs are also required to demonstrate a Significant Business Presence in the Charlotte Consolidated Statistical Area ("CSA"). The City applies the "totality of the circumstances test", that takes into consideration a number of factors, including but not limited to, whether the business enterprise is headquartered in the Charlotte CSA, the number of full-time employees, the location of managerial or decision-making personnel, mail delivery locations, lease agreements and the percentage of income or revenue derived from work in the Charlotte CSA.

4. CBI Goal Setting Policies and Procedures

The CBI Policy requires the Program Manager to establish a systematic methodology for setting SBE and M/WBE goals. Factors to be considered are contract size, availability of subcontracting opportunities, other data as applicable, and for M/WBE goals, whether they are warranted to remedy the effects of past discrimination.

Based on the 2017 Disparity Study, the City has set an overall, annual, aspirational M/WBE goal of 20.9%. Goals are set on contracts for construction; architecture, engineering and surveying; professional services; other services; and goods and commodities.

The annual goal is applied only to construction contracts of \$500,000 and under, and service and commodities contracts of \$100,000 and under (referred to as informal contracts). M/WBE goals are only set for those categories of firms that have experienced documented discrimination. According to the 2017 Disparity Study, these groups are African Americans, Hispanics and Native Americans. For construction contracts under \$200,000, the user departments are required to use race-neutral outreach measures to encourage participation of MWSBEs as prime contractors. Exempt Contracts are excluded from goal setting.

SBE and/or M/WBE subcontracting goals are established when subcontracting opportunities have been identified and when there are M/W/SBEs available to perform the work. M/WBE subcontracting goals are limited to African American-owned, Hispanic-owned and Native American-owned firms.

Departments must obtain a Project Goal Waiver from the CBI Office for construction projects of \$200,000 or greater and for architecture, engineering and surveying contracts of \$100,000 or greater that do not have subcontracting opportunities. The Department CBI Liaison develops the weighted average subcontracting goals using a detailed estimation of the scopes of work to be performed, available SBEs and African American, Hispanic and Native American MBEs listed in the City's vendor database, and a review of historical data of actual results on past similar project scopes.

5. Counting Participation Towards Contract Goals

To be counted towards the contract goal, the bidder's proposed subcontractor must hold a valid certification with the City as of the proposal due date, perform a Commercially Useful Function ("CUF"), perform within the areas(s) for which it is certified or substantiate that the subcontractor has performed similar work in the past and meet the goal category for the project.

Work that an M/W/SBE performs with its own workforces can be counted toward the goal on construction contracts under \$500,000 and on service contracts under \$200,000.

6. Pre-Award Contract Procedures

Bidders with the intent to self-perform 100% of the work on construction contracts with an M/W/SBE goal can submit an affidavit stating that the bidder does not customarily subcontract this type of project and has the capability to perform all elements of the work with its own forces. In these cases, the bidder is not required to submit evidence of Good Faith Efforts ("GFEs"). Should the City determine that the bidder is not licensed to perform or will not be performing all of the work on the contract, the City may reject the bid for noncompliance. Proposers can self-perform on a service contract if they can certify in their proposal that they are licensed, qualified and able to perform all aspects of the contract without subcontracting or have a valid business reason for self-performing all the work.

A Utilization Plan, documenting the subcontractors and suppliers the bidder intends to use to meet the contract goal, and a GFE Affidavit, documenting GFEs undertaken by the bidder if the contract goal was not fully met, are due with the bid. Failure to include a properly completed Plan or Affidavit is grounds for rejecting the bid.

GFEs must be documented for each subcontracting goal that is not fully met. Failure to demonstrate acceptable GFEs is grounds for rejection of the bid. The City has established a point system to determine acceptable GFEs. Bidders must earn a minimum of 50 out of 145 GFE points that are calculated separately for each unmet subcontracting goal. All GFEs must be completed prior to bid opening, but supporting documentation is due within the time frame specified by the City or, absent a specified time, within three business days after a request from the City.

7. Post Contract Award Procedures

The CBI Office is responsible for reviewing all contracts, including whether the committed subcontracting goals are being met; the contractor has improperly terminated, replaced or reduced the work of an M/W/SBE; the contractor is complying with contract amendments, renewals or additions to scope; and whether M/W/SBEs are performing a CUF.

The City installed the B2Gnow InclusionCLT contract compliance and certification system in 2019. This system streamlines and automates the City's Program data gathering, tracking, reporting and vendor management. The system enables close monitoring, tracking and reporting of compliance with M/W/SBE and DBE commitments. Prime vendors are required to report payments made to all subcontractors and suppliers. Subcontractors are then required to review and confirm the accuracy of the payment amount. Failure to provide payment reports within the specified time period results in sanctions and withholding payment.

The CBI Policy imposes on all contractors an affirmative, ongoing obligation to meet or exceed the committed contract goals over the life of the contract. Contractors can be deemed to be in violation and in breach of contract if the

City determines that the contractor will not meet the subcontracting goal and the reasons for not meeting goal are within the contractor's control.

A contractor may lose the ability to obtain goal credit towards the subcontracting goal when there is a change in an M/W/SBE's certification status after bid submission if the M/W/SBE's certification is terminated because it is determined to be an affiliate of the contractor or because of false or fraudulent claims about which the contractor was aware.

Dollars paid to an SBE whose certification expires or who graduates from eligibility under the CBI Policy will be counted towards the contract goal.

The North Carolina General Statutes require prime contractors to pay subcontractors for completed work within seven days of receipt of the final or periodic payment received by the prime contractor. If this commitment is not met, the prime contractor is required to pay the subcontractor interest of one percent per month on the unpaid balance starting on the eighth day. This requirement applies to all MWSBE subcontracts unless the prime contractor and subcontractor have entered into a quick pay agreement.

8. CBI Program Violations, Investigations and Sanctions

A violation of the CBI Program by a contractor can constitute a material breach of contract. The CBI Policy provides for remedies that include the termination or suspension of the contract for default; withholding all payments due on the contract until the violation has been resolved and a mutually agreeable resolution has been reached; and assessing liquidated damages.

9. Vendor Outreach

The City and the CBI Program use multiple approaches to encourage small business participation in procurement opportunities. The City regularly holds pre-bid conferences to provide information about the bidding process to small businesses. The City also sponsors several supportive services programs:

- Advance Your Business Tuition Assistance Program provides certified firms with up to \$300 of support towards classes taken at the Small Business Center at Central Piedmont Community College.
- Professional Association Sponsorship provides certified businesses \$100 toward the first-year membership in a local association or chamber of commerce. The sponsorship is provided to facilitate networking and promote joint ventures.

The City and the CBI Program work with other government agencies, nonprofit organizations, academic institutions and chambers of commerce to provide assistance to increase small business capacity and advance business skills. The CBI Program partners with local minority advocacy groups such as the Metrolina Minority Contractors Association, the Hispanic Contractors Association of the Carolinas and the Latin American Chamber of Commerce to perform outreach and provide technical support to small and minority-owned and woman-owned businesses.

From 2016 through 2020, the City sponsored or participated in over 33 outreach events. These ranged from Town Halls sponsored by City Council members to the NBA All Star MWSBE Meet & Greet to the Black Enterprise Entrepreneur Summit.

10. CBI Staff Training

CBI Program staff attend the annual B2Gnow User Training Conference and the American Contract Compliance Association's annual National Training Institute.

11. Experiences with the CBI Program

To explore the experiences of businesses seeking opportunities on City contracts, we solicited input from 93 individuals and sought their suggestions for changes. We also collected written comments from 490 businesses about their experiences with Charlotte's program through an electronic survey. The following are summaries of the issues discussed during the interviews and in the survey comments.

a. Experiences with CBI Program's Policies and Procedures: Business Owner Interviews

- Most M/WBEs reported that the CBI Program has benefited their firm. Contract goals were viewed as necessary to ensure equal access to City contracting opportunities.
- Most prime vendors stated they have been able to meet MWSBE goals on City contracts.
- Some scopes were more difficult than others to obtain qualified M/ WBE subcontractors.
- Engineering firms seemed to face more challenges finding qualified firms.
- Task order contracts, which by design do not provide definite scopes at the time of contract award, were especially problematic.

- Some bidders complained that certified firms were sometimes listed in more industry codes than they were qualified to perform.
- The requirement that the certified firm be based in the Charlotte Statistical Area increased the difficulty of meeting goals.
- Some large contractors reported that using a more flexible procurement method, such as design-build contracts, would help to increase opportunities for M/WBEs.
- Several participants had been able to successfully submit documentation of their GFEs to meet the contract goals.
- However, when there was a change in scope, even at the City's behest, the prime contractor was still required to meet the goal.
- Many owners stated that small firms and M/WBEs would benefit from more technical assistance and supportive services.
- Some more experienced firm representatives suggested more offerings for mature firms.
- A mentor-protégé program was another approach to increasing the capabilities of M/WBEs recommended by both M/WBEs and large non-M/WBEs.

b. Experiences with the CBI Program: Business Owner Survey Responses

i. Overall Experiences with CBI Program and Requirements

- Minority and woman respondents strongly supported the program. Many stated the program was essential to obtaining business.
- Many M/WBE respondents praised the program for providing more exposure and access to both prime contracting and subcontracting opportunities.
- Several respondents complimented the program and their experiences working with the City.
- Several minority and woman respondents suggested that the City should publicize the CBI Program to qualified firms to encourage participation.
- While most respondents supported the program, many also found the certification process challenging to navigate, paperwork intensive and cumbersome.
- Some Black woman respondents noted that WBE certification criteria should be expanded to include minority women.

ii. Access to City Contracting Opportunities

- Several M/WBE firms suggested that local preference requirements should be expanded to include additional North Carolina counties.
- Some respondents stated that the City and prime contractors repeatedly use the same firms.
- A few respondents thought the City could do more to open up contracting opportunities for small firms.
- Minority and woman respondents suggested that the City offer smaller projects or should "unbundle" contracts.
- Some M/WBE respondents requested more opportunities to perform as prime contractors.
- Many M/WBEs requested more technical support and training to respond to contract solicitations and RFPs.
- Several M/WBE respondents viewed greater access to City Staff as a way to assist them.

iii. CBI Program Compliance

- M/WBE respondents suggested more oversight is required to ensure prime contractors comply with program requirements.
- Several M/WBE contractors noted the effectiveness of verifying contractor payments to ensure prime contractor compliance.

iv. CBI Program Outreach

- Many M/WBE respondents were unaware of bidding opportunities and requested more outreach.
- Respondents were particularly interested in additional support to facilitate relationship building between subcontractors/ subconsultants and prime contractors/consultants.

v. Experiences with Business Support Services

- Firms that participated in supportive services generally found them helpful.
- Some M/WBE firms who had participated in joint ventures and mentor protégé programs reported good outcomes from these partnerships.
- Mentor-protégé programs, partnerships and Joint Ventures were seen as important approaches to help minority-owned and woman-owned businesses.

- Some respondents suggested supportive services programs could offer more comprehensive instruction and training to help develop concrete skills, techniques and strategies.
- Assistance with obtaining capital, bonding and insurance was cited by many M/WBE respondents as critical to increasing their capacity to take on more business.
- Several respondents noted that Black firms are in particular need of assistance in obtaining capital and access to financial resources.

C. Contract Data Analyses of the City of Charlotte's Contracts

We analyzed contract data for 2015 through 2020 for the City of Charlotte's contracts. The Initial Contract Data File contained 3,218. Because of the large number of contracts, CHA constructed a stratified random sample of 1,056 contracts.⁷

In order to conduct the analysis of the sample of contracts, we constructed all the fields necessary for our analysis where they were missing in the City's contract records (*e.g.*, industry type; zip codes; six-digit North American Industry Classification System ("NAICS") codes of prime contractors and subcontractors; and M/WBE subcontractor information, including payments, race, gender; etc.). Tables 1-1 and 1-2 provide data on the Final Contract Data File ("FCDF").

Contract Type	Total Contracts	Share of Total Contracts
Prime Contracts	751	40.5%
Subcontracts	1,105	59.5%
TOTAL	1,856	100.0%

Table	1-1: I	Final	Contract	Data	File
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Source: CHA analysis of City of Charlotte data

^{7.} The sample was constructed by first stratifying the contract universe into its four industries components: Construction, Goods, Professional Services, and Services. With each component, we derived a random sample where distribution of contracts within that component across range of contract dollars approximated that distribution within the component universe. To achieve this, we separated the universe into thirds with one third containing the contracts with the lowest contract dollars values, one third containing contracts with the highest contract dollars values, and a middle third containing the rest. If, in the universe the third with the highest contract dollars captured 90% of all of the contract dollars in that component, then in the sample, the third with the highest contract dollars captured approximately 90% of all of the contract dollars.

Business Type	Total Contract Dollars	Share of Total Contract Dollars	
Prime Contracts	\$1,344,064,359	80.6%	
Subcontracts	\$322,929,868	19.4%	
TOTAL	\$1,666,994,227	100.0%	

Table 1-2: Final Contract Data File Net Dollar Value

Source: CHA analysis of City of Charlotte data

The FCDF, which establishes the City's product market, consists of 161 NAICS codes, with a total contract dollar value of \$1,666,994,227.

As described in Chapter II, prior to the analysis of the City's utilization of M/WBEs, courts have required agencies to determine the geographic market within which they operate. To determine the geographic market area, we applied the standard of identifying the firm locations that account for at least 75% of contract and sub-

contract dollar payments in the FCDF.⁸ Firm location was determined by zip code and aggregated into counties as the geographic unit. We explored a geographic market consisting of the 13 counties constituting the Charlotte CSA; when those geographic parameters were imposed upon the FCDF, the resulting contract dollars accounted for just 58.6% of the FCDF. Analyzing this subset of the FCDF would not paint a proper picture of the City's procurement activity. We next explored a geographic market consisting of the State of North Carolina and York County in South Carolina. Firms within these parameters accounted for 74.0% of the FCDF. As this approximated the standard, we decided to use North Carolina and York County as the geographic market.⁹

Using North Carolina and York County as the geographic market, Table 1-3 presents summary data on the City's utilization of M/WBEs, measured in percentage of contract dollars.

Table 1-3: Distribution of Contract Dollars by Race and Gender (share of total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	MBE/ WBE	Non-MBE/ WBE	Total
TOTAL	2.4%	0.9%	1.9%	1.1%	6.3%	5.8%	12.1%	87.9%	100.0%

Source: CHA analysis of the City of Charlotte data

^{8.} J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, National Academies of Sciences, Engineering, and Medicine, 2010 (*"National Disparity Study Guidelines"*), at p. 29.

^{9.} Beyond York, two other counties in South Carolina are in the Charlotte CSA. However, no firms receiving contracts were located in Chester County and the one firm in Lancaster County that received a contract accounted for only 0.0016% of the FCDF.

Using the modified "custom census" approach to estimating availability and the further assignment of race and gender using the FCDF, the Master M/WBE/HUB Directory and other sources, we determined the unweighted availability of M/WBEs in the City's market area. Table 1-4 presents these data. For further explanation of the role of unweighted and weighted availability and how these are calculated, please see Appendix D.¹⁰

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
2.0%	0.3%	0.2%	0.2%	2.6%	4.3	7.1%	92.9%	100.0%

Table 1-4: Aggregated Unweighted M/WBE Availability

Source: CHA a	nalysis of the	e City of Charlotte date	1
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We next determined the aggregated availability of M/WBEs, weighted by the City's spending in its geographic and industry markets. Table 1-5 presents these results. The overall, weighted M/WBE availability result can be used by the City to determine its overall, annual aspirational goal.

Table 1-5: Aggregated Weighted M/WBE Availability

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
3.8%	0.9%	0.4%	0.8%	5.9%	7.2%	13.1%	86.9%	100.0%

Source: CHA analysis of the City of Charlotte data; Hoovers; CHA Master Directory

We next calculated disparity ratios for total M/WBE utilization compared to the total weighted availability of M/WBEs, measured in dollars paid.

A *disparity ratio* is the relationship between the utilization and weighted availability, determined above. Mathematically, this is represented by:

$$DR = U/WA$$

Where DR is the disparity ratio; U is utilization rate; and WA is the weighted availability.

The courts have held that disparity results must be analyzed to determine whether the results are "significant". There are two distinct methods to measure a result's significance. First, a "large" or "substantively significant" disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. A substantively significant disparity supports the inference that the

^{10.} The USDOT "Tips for Goal Setting" urges recipients to weight their headcount of firms by dollars spent. *See* Tips for Goal-Setting in the Disadvantaged Business Enterprise Program, ttps://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise.

result may be caused by the disparate impacts of discrimination.¹¹ Second, statistically significant disparity means that an outcome 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.¹² A more indepth discussion of statistical significance is provided in Chapter IV and Appendix C. Table 1-6 presents the calculated disparity ratios for each demographic group. The disparity ratio for Blacks is substantively significant.

Table 1-6: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	61.9% [‡]	100.8%	521.5%	135.8%	106.1%	80.5%	92.0%	101.2%

Source: CHA analysis of the City of Charlotte data ‡ Indicates substantive significance

Upon request from the City, CHA replicated the above analysis after disaggregating the NAICS codes into four industries:

- Construction
- Goods
- Professional Services
- Services

For each of these industries, we present the distribution of contract dollars by race and gender; the unweighted M/WBE availability for City contracts; the aggregated weighted availability for City contracts; and disparity ratios by demographic group. These results are provided in Appendix E.

Overall, we found that, compared to non-M/WBEs, minority-owned and womanowned firms were concentrated in a different subset of industries. Further, in some industries, only a few M/WBEs received contracts in contrast to non-M/ WBEs. This suggests that although the City's Program has been quite successful in creating opportunities for minority-owned and woman-owned firms, these benefits have not been spread evenly across all groups or subindustries. We find the

^{11.} See U.S. Equal Employment Opportunity Commission regulation, 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.").

^{12.} A chi-square test – examining if the utilization rate was different from the weighted availability – was used to determine the statistical significance of the disparity ratio.

data as a whole support the conclusion that M/WBE firms have not reached parity in all aspects of the City's contracting activities compared to non-M/WBE firms.

It is standard CHA practice to explore any M/WBE disparity ratio that exceeds 100%. This is to ensure that an abnormal pattern of M/WBE concentration does not account for disparity ratios greater than 100%, thereby leading to the unwarranted conclusion that race-conscious or gender-conscious remedies are no longer needed to redress discrimination against a particular socially disadvantaged group. It is possible that a group's disparity ratio that is larger than 100% might be the result of the success of a few firms and not indicative of the experiences of the broad set of firms in that group.

In addition, contract dollars received by M/WBEs may be concentrated in a few NAICS codes and this concentration pattern may differ from that of non-M/WBEs. For instance, in a world where all firms- regardless of race and gender- enjoyed current positioning in the marketplace, one would expect that each demographic group would receive similar shares of their total contract dollars for the same NAICS codes. In other words, if hypothetically, Hispanic firms received 25% of all of their contract dollars from NAICS Code 123456, then we would expect that non-M/WBEs would receive approximately 25% of all of their contract dollars from NAICS Code 123456. To explore this guestion, Table 1-7 presents an overview of the top three NAICS codes where M/WBEs received contract dollars and compares these results to the results for non-M/WBEs in those same NAICS codes. This overview allows us to see if parity exists. (More detail is presented in Chapter IV.) Panel A in the Table presents the three NAICS codes where Black firms received their largest amount of contract dollars. For instance, Black firms received 38.7% of all of their contract dollars from NAICS code 484220 (Specialized Freight (except Used Goods) Trucking, Local). If there were parity, non-M/WBEs would receive approximately 38.7% of all of their contract dollars from this code and the ratio of the Black share to the non-M/WBE share would approximate 1:1. In reality, while this code provides 38.7% of all Black contract dollars on City contracts, it provides just 0.1% of non-M/WBE contract dollars. The resulting ratio is 263.3:1. Overall, the three NAICS codes which contributed the most contract dollars to Black firms contributed 56.7% to all contract dollars for Black firms. In contrast, these three codes contributed just 3.0% to all contract dollars to non-M/WBE firms. The subsequent ratio of 18.7:1 means that Black firms receive 18.7 times as many of their contract dollars from these three codes compare to non-M/WBEs. This pattern of disproportionality is true for each M/WBE group as presented in Panels B through Panel E. Overall, the level of disproportionality in individual NAICS codes ranges from 0.2 times for Asian firms in NAICS code 237310 to 263.3 times for Black firms in NAICS code 484220. Moving from an examination of individual codes to the three leading codes, the level of disproportionality ranges from 1.5 for White women firms to 18.7 for Black firms.¹³

Table 1-7: Comparing the Share of All Spending Received by Each M/WBE Group in the Groups' Three Leading NAICS Codes to The Share of All Spending Received by non-M/WBEs in those NAICS Codes¹⁴

NAICS	NAICS Code Description	NAICS Code Share of M/ WBE Group Spending	NAICS Code Share of Non-M/WBE Spending	Ratio of M/WBE Share to Non- M/WBE Share
Panel A:	NAICS Code Share of All Spending - Blac	k Compared to Noi	n-M/WBE	
484220	Specialized Freight (except Used Goods) Trucking, Local	38.7%	0.1%	263.3
238210	Electrical Contractors and Other Wiring Installation Contractors	9.6%	2.4%	4.0
561730	Landscaping Services	8.4%	0.5%	18.1
Total 3-c	ode Share of Total Group Dollars	56.7%	3.0%	18.7
Panel B:	NAICS Code Share of All Spending - Hisp	anic Compared to	Non-M/WBE	
237310	Highway, Street, and Bridge Construction	27.7%	21.1%	1.3
238120	Structural Steel and Precast Concrete Contractors	25.5%	0.3%	94.8
238210	Electrical Contractors and Other Wiring Installation Contractors	18.7%	2.4%	7.7
Total 3-c	ode Share of Total Group Dollars	71.9%	23.8%	3.0
Panel C:	NAICS Code Share of All Spending: Asiar	Compared to Non	-M/WBE	
237990	Other Heavy and Civil Engineering Construction	65.0%	4.5%	14.5
541519	Other Computer Related Services	25.4%	0.0%	
237310	Highway, Street, and Bridge Construction	4.4%	21.1%	0.2
Total 3-c	ode Share of Total Group Dollars	94.9%	25.6%	3.7
Panel D:	NAICS Code Share of All Spending - Nati	ve American Comp	ared to Non-M	/WBE
237110	Water and Sewer Line and Related Structures Construction	44.3%	14.7%	3.0

^{13.} Because non-M/WBEs received no contracts in NAICS code 541519, a ratio could not be calculated comparing Asian firms to non-M/WBEs.

NAICS	NAICS Code Description	NAICS Code Share of M/ WBE Group Spending	NAICS Code Share of Non-M/WBE Spending	Ratio of M/WBE Share to Non- M/WBE Share
238910	Site Preparation Contractors	26.4%	3.5%	7.6
484220	Specialized Freight (except Used Goods) Trucking, Local	6.8%	0.1%	46.5
Total 3-c	ode Share of Total Group Dollars	77.5%	18.4%	4.2
Panel E:	NAICS Code Share of All Spending - V	Vhite Women Com	pared to Non-M	M/WBE
237110	Water and Sewer Line and Related Structures Construction	27.3%	14.7%	1.9
237310	Highway, Street, and Bridge Construction	22.5%	21.1%	1.1
236210	Industrial Building Construction	8.4%	3.3%	2.6
Total 3-0	code Share of Total Group Dollars	58.3%	39.1%	1.5

Source: CHA analysis of City of Charlotte data

D. Analysis of Disparities in the City of Charlotte Area Economy

Evidence of the experiences of minority- and woman-owned firms outside of raceconscious or gender-conscious procurement programs is relevant and probative of the likely results of the City adopting a race-neutral program, because contracting diversity programs are rarely imposed outside of specific government agencies. To examine the outcomes throughout the City of Charlotte area economy, we explored two Census Bureau datasets and the government and academic literature relevant to how discrimination in the City's market and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in the City's prime contract and subcontract opportunities.

We analyzed the following data and literature:

• Data for the State of North Carolina from the Census Bureau's American Community Survey from 2015 through 2019. This rich data set establishes with greater certainty any causal links between race, gender and economic outcomes. We employed a multiple regression statistical technique to examine the rates at which minorities and women form firms. In general, we

^{14.} Figures have been rounded for readability in the Tables.

found that even after considering potential mitigating factors, business formation rates by Blacks, Hispanics and White women are lower compared to White males. The data indicate that non-Whites and White women receive lower wages and Blacks and White women receive lower business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect non-White and White woman entrepreneurs.

- Industry Data from the Census Bureau's 2017 Annual Business Survey from 2017. This dataset indicated large disparities between M/WBE firms and non-M/WBE firms when examining the sales of all firms, the sales of employer firms (firms that employ at least one worker), and the payroll of employer firms.
- Surveys and literature on barriers to access to commercial credit and the development of human capital further reports that minorities continue to face constraints on their entrepreneurial success based on race. These constraints negatively impact the ability of firms to form, to grow, and to succeed. These results support the conclusions drawn from the anecdotal interviews and analysis of the City's contract data that M/WBEs face obstacles to achieving success on contracts outside of M/WBE programs.

All three types of evidence have been found by the courts to be relevant and probative of whether a government will be a passive participant in overall marketplace discrimination without some type of affirmative intervention. This evidence supports the conclusion that the City should continue to use race-conscious contract goals to ensure a level playing field for all firms.

E. Qualitative Evidence of Race and Gender Barriers in the City of Charlotte's Market

In addition to quantitative data, anecdotal evidence of firms' marketplace experiences is relevant to evaluating whether the effects of current or past discrimination continue to impede opportunities for M/WBEs such that race-conscious contract goals are needed to ensure equal opportunities to compete for City prime contracts. To explore this type of anecdotal evidence, we received input from 93 participants in small group business owner interviews. We also obtained written comments from 490 businesses that participated in an electronic survey.

Consistent with other evidence reported in this Study, the business owner interviews, and the survey results strongly suggest that minorities and women continue to suffer widespread discriminatory barriers to full and fair access to contracts and associated subcontracts in the City of Charlotte's market area.

1. Business Owner Interviews

Many minority and woman business owners reported that while some progress has been made in integrating their firms into public and private sector contracting activities through race-conscious and gender-conscious contracting programs, significant barriers remain.

The following are brief summaries of the most common views expressed by numerous participants.

- Many minority and woman interview participants reported that they still encounter biases, stereotypes and negative assumptions about their qualifications and competency. Several owners reported that being certified as an M/WBE often carries a stigma.
- Some M/WBEs found it difficult to penetrate the industry networks necessary for entrepreneurial success.
- Some minority owners had suffered blatantly hostile environments on the basis of race.
- Several women, especially in construction, had experienced sexist attitudes and behaviors.
- Professional opportunities were sometimes explicitly denied because of gender.

2. Electronic Business Owner Survey

Results from the electronic survey were similar to those of the interviews.

- A little under one third (31.2%) reported that they still experience barriers to contracting opportunities based on their race and/or gender.
- Almost one quarter (24.4%) said their competency was questioned because of their race or gender.
- Fourteen percent indicated they had experienced job-related sexual or racial harassment or stereotyping.
- Discrimination from suppliers or subcontractors because of their race and/or gender was experienced by 19.8% of the respondents.
- Almost one third (30.5%) of M/WBE respondents reported that they did not have equal access to the same information as non-certified firms in their industry.
- Almost one quarter (23.4%) of M/WBE respondents indicated that they do not have access to informal and formal networking information.

- Among M/WBEs, 7.9% reported challenges in their efforts to obtain bonding. In comparison, only one percent of non-M/WBEs reported difficulty with obtaining bonding.
- Over one third (35.5%) of M/WBEs reported experiencing barriers in their efforts to obtain financing and loans. In comparison, only 14.6% of non-minority firms reported such difficulties.
- Among M/WBEs, 6.3% reported experiencing barriers to obtaining insurance. Only one percent of non-M/WBEs reported such difficulties.
- Over 65% (65.2%) of M/WBEs reported that they are not solicited for City or government projects with M/WBE goals.
- Over 65% (65.7%) of M/WBEs also reported that they are not solicited for private projects and projects without goals.
- A majority of M/WBEs (55.9%) reported that their firm's contract size was either well or slightly below the amount they are qualified to perform.
- More than three quarters (80.4%) of minority and female respondents reported that they could take on up to 75% more work if it were offered. Almost six percent (5.8%) could take on up to 100% more work, and almost nine percent (8.9%) reported they could more than double their amount of work.

Responses to the survey's open-ended questions described these experiences in further detail. The following is a summary of the most common written responses received.

- Many minorities reported that fair opportunities to compete for contracts were not available because of systemic racial barriers.
- Many minority business owners related instances of overt racism, demeaning comments and harassment.
- Minority respondents were often subject to stereotypical assumptions and attitudes on the basis of race. Many reported their credentials and competency are routinely questioned.
- Some respondents noted that it can be difficult, if not impossible, to know whether they had been subjected to discrimination.
- Some minority respondents noted their experiences with discriminatory behavior had improved.
- Woman respondents reported experiencing sexist attitudes about their competency, skill and professionalism. Some women reported encountering sexist behaviors and stereotypical attitudes about their role

and authority. Outright sexual harassment remains a challenge for some women.

- Many minority and woman business owners felt excluded from formal and informal networks necessary for building relationships and for success. Some reported that they were not receiving the same information as non-certified firms. Access to decision-makers was seen as a challenge.
- Some felt that government agency staff were unavailable to assist with networking.
- Some M/WBE firms reported that being small and new put them at a disadvantage.
- Many minority and woman respondents felt that prime bidders often use them only to meet race-conscious or gender-conscious procurement goals.
- Many M/WBEs reported discriminatory barriers when trying to obtain financing and bonding that have reduced their capacity to grow and compete on an equal basis.
- Some minority and woman respondents reported being charged higher pricing for materials based on their race, ethnicity and gender. Then, they are often under pressure to reduce their pricing relative to their White male counterparts.

F. Recommendations for Enhancements to The City of Charlotte's Business Inclusion Program

The quantitative and qualitative data in this Study provide a thorough examination of the evidence regarding the experiences of M/WBEs in the City of Charlotte's geographic and industry markets. As required by strict constitutional scrutiny, we analyzed evidence of the District's utilization of M/WBEs as a percentage of all firms as measured by dollars spent, as well as M/WBEs' experiences in obtaining contracts in the public and private sectors. We gathered statistical and anecdotal data to provide the City with the evidence necessary to determine whether there is a strong basis in evidence for the continued use of race-conscious and genderconscious goals for its CBI Program for HUBs, and if so, how to narrowly tailor its Program.

Through the CBI Office, the City of Charlotte has implemented an aggressive program. Setting goals, conducting outreach, and enforcing policy requirements have resulted in a few M/WBEs reaching parity in City contracting. However, evidence beyond the City's achievements strongly suggests these results reflect the effect of the CBI program.

Outside of City and other local government contracts, M/WBEs face large disparities in opportunities for public sector and private sector work in the Charlotte area markets. The results of the anecdotal data analyses further support the inference that utilization is the result of contract goals; in the absence of affirmative efforts, minority and woman businesses receive little work, remain subject to biases and are often shut out of business opportunities.

The quantitative and qualitative findings support the conclusion that the current effects of past discrimination and ongoing bias would be barriers to City work in the absence of race-conscious and gender-conscious remedies.

Based upon these results, we make the following recommendations. We recognize that many of our recommendations, both race-neutral and gender-neutral and race-conscious and gender-conscious, will require more staff and technical resources to be devoted to the Program. It will also be important to have refresher training on the Program and any new elements for City staff with contracting or procurement responsibilities. Similar information should also be provided to other senior City leadership, elected officials and the public.

1. Augment Race-Neutral and Gender-Neutral Measures

The courts require that governments use race-neutral and gender-neutral approaches to the maximum feasible extent to address identified discrimination. This is a critical element of narrowly tailoring the Program, so that the burden on non-M/WBEs is no more than necessary to achieve the City's remedial purposes. Increased participation by M/WBEs through race-neutral measures will also reduce the need to set M/WBE contract goals. We therefore suggest the following enhancements of Charlotte's current efforts, based on the business owner interviews and survey responses, input of City staff, and national best practices for contracting affirmative action programs.

a. Develop a Long Term Procurement Forecast

We recommend that the City expand its current procurement forecast to not only include an annual forecast, but also anticipated capital improvement projects for the next five years. A comprehensive and transparent site that provides information on upcoming bid opportunities is one race-neutral and gender-neutral measure that will assist all firms to access information.

b. Extend the Quick Pay Program

The City currently offers a Quick Pay option as part of the consideration of GFEs for a bidder that does not meet the contract goal at the time of bid submission. The prime vendor commits to paying participating M/W/SBEs within 20 days after the contractor confirms that the M/W/SBE has properly performed the subcontracted work. To the extent permitted by law, we suggest that this option be extended to firms that meet the goals and across all industries. The incentive to the prime vendor will need to be a commitment for faster payment by the City to the prime vendor, perhaps within 21 days of submission of the prime's approved invoice.

c. Expand Supportive Services Offerings

The City currently offers several programs and events for vendor training. Many firms reported these were helpful in increasing their capabilities and overall business skills. However, vendors and City staff requested additional support in the following areas.

- Classes on estimating bids and preparing paperwork.
- More sophisticated and advanced offerings for mature M/WBEs.
- Loan programs to assist small firms to obtain needed funding to perform on City contracts. There are many models, including linked deposit programs and revolving loan funds, that can help to fulfill these needs.
- A robust technical assistance, capital access and bonding support program for construction firms.

2. Continue to Implement Narrowly Tailored Race- and Gender-Conscious Measures

a. Use the Study to Set the Overall, Annual Aspirational HUB Goal

The City's Program has been successful in opening up opportunities for minority-owned and woman firms on its contracts. As reported in Chapter IV, M/WBEs in the aggregate have reached parity on City contracts. When we examined whether firms were concentrated within an industry or between industries on the basis of race or gender, however, a picture emerged of unequal outcomes for M/WBEs compared to non-M/WBEs.

Further, as documented in Chapter V, when examining outcomes in the wider economy using Census Bureau data, it is clear that M/WBEs do not yet enjoy full and fair opportunities to compete for construction and con-

struction-related services contracts. The results of numerous small business credit surveys also reveal that M/WBEs, especially Black-owned firms, suffer significant barriers to business financing. There are also race-based barriers to the development of the human capital necessary for entrepreneurial success.

Our interviews with individual business owners and the results of our survey further buttress the conclusion that race and sex discrimination remain persistent barriers to equal contacting opportunities. Many minority and female owners reported that they still encounter barriers based on their race and/or gender and that without affirmative intervention to increase opportunities through contract goals, they will continue to be denied full and fair chances to compete.

In our judgment, the City's utilization of M/WBEs is primarily the result of the operations of its CBI Program, not the remediation of discrimination outside of contracting affirmative action programs. Without the use of goals, Charlotte may become a "passive participant" in the market failure of discrimination.

We therefore recommend that the City continue to use narrowly tailored race-conscious and gender-conscious measures. These should include using the weighted availability estimates to set its overall, annual aspirational HUB goal.

b. Use the Study to Set MBE and WBE Contract Goals

In addition to setting overall, annual targets, the City should use the Study's detailed unweighted availability estimates as the starting point for contract specific goals for MBE and WBE participation. As discussed in Chapter II of this Report, an agency's constitutional responsibility is to ensure that goals are narrowly tailored to the specifics of the project. The aspirational goal may be referenced in a solicitation that does not include contract goals so long as it is clear that there is no requirement for any specific action by the bidder and the participation of M/WBEs is not a factor in contract award.

The narrowly tailored contract goal setting methodology involves four steps, regardless of the industry scopes of work of the project:

- Weight the estimated dollar value of the scopes of the contract by sixdigit NAICS codes, as determined during the process of creating the solicitation.
- Determine the unweighted availability of M/WBEs in those scopes, as estimated in the Disparity Study.

- Calculate a weighted goal based upon the scopes and the availability of at least three available firms in each scope.
- Adjust the resulting percentage based on current market conditions and progress towards the annual goal.

Where there is a significant change order issued by the City, the contract goal should be evaluated to determine the change's impact on goal attainment. If an M/WBE's scope is reduced such that the original contract goal will not be met, the contractor should be required to make GFEs to add participation if possible. If an M/WBE's scope is increased, the M/WBE must be used for the increased amount if it is able to perform.

Written procedures spelling out the steps should be drafted and disseminated.

This constitutionally mandated approach may result in goals that are higher or lower than the annual goals, including no goals where there are insufficient subcontracting opportunities (as is often the case with supply contracts) or an insufficient number of available firms.

We recommend that SBE firms that are not also certified as MBEs or WBEs not be counted for credit towards meeting the MBE or WBE contract goals. The purpose of the Program and the use of narrowly tailored contract goals is to remedy identified discrimination on the basis of race or gender. Minority-owned or woman-owned firms that are only SBE certified should be encouraged to apply for certification through the State of North Carolina's HUB program.

For alternative delivery methods such as design-build contracts, the City should follow the guidance from the U.S. Department of Transportation on how best to incorporate M/WBE program elements into these phased contracts.¹⁵

We further urge the City to bid some contracts without goals that it determines have significant opportunities for M/WBE participation. These control contracts can illuminate whether certified firms are used or even solicited in the absence of goals. The development of some "unremediated markets" data, as held by the courts, will be probative of whether the Program remains needed to ensure that the playing field remains level for minorities and women.

^{15.} https://www.fhwa.dot.gov/civilrights/programs/dbe_acm_handbook_20180820.pdf; see also 49.C.F.R. §26.53(e) ("In a "design-build" or "turnkey" contracting situation, in which the recipient lets a master contract to a contractor, who in turn lets subsequent subcontracts for the work of the project, a recipient may establish a goal for the project. The master contractor then establishes contract goals, as appropriate, for the subcontracts it lets.").

c. Clarify and Update CBI Program Administration Policies and Procedures

While the current Program has produced admirable results, there are some revisions that can strengthen the City's efforts. In general, we urge the City to model its provisions after the regulations for the DBE program for US Department of Transportation.¹⁶ These regulations have become the "gold standard" and best practices for race-conscious or gender-conscious procurement programs and have been upheld by every federal court that has considered a challenge. They have been amended several times since their adoption in 1999 and represent the best national thinking on legally defensible and administratively successful program implementation. Further, as discussed in Chapter II of this Report, courts have looked to the DBE regulations in evaluating whether a local agency's program is constitutional.

- Expand the pool of firms eligible for certification and to be counted towards contract goals to include firms located anywhere in the State of North Carolina and York County, South Carolina. This will align the eligibility standards with the City's market area, as found by the Study's analysis. The City might add that firms with a "significant local business presence" in the Charlotte market, perhaps documented by the receipt of at least three contracts within the last three years, also be eligible to apply for City certification.
- Permit a firm owned by minority females to be certified as both an MBE and a WBE. Such a firm could be counted towards either goal by the prime bidder but could not be double counted or have its dollars split between the two goals on a particular contract. This will expand opportunities for M/WBEs while providing flexibility for bidders. This will require a change in state law.
- Recognize firms for M/WBE status using NAICS codes (developed by the Census Bureau), not National Institute of Government Purchasing ("NIGP") codes. NIGP codes are extremely granular, which makes the process of conducting outreach to meet goals very burdensome to prime bidders. NAICS codes will allow prime vendors to more easily search for firms and reduce the certification burden on both applicants and the City. Switching to NAICS codes will also align the City's processes and lists with the data in this Report.
- Count the self-performance of certified prime vendor MBEs and WBEs towards the contract goal for which they qualify. While the City's documents describe the contract goals as "subcontracting goals", in practice the goals properly apply to the entire amount of the contract

^{16. 49} C.F.R. Part 26.

value, not just to those dollars expected to be spent with subcontractors. Prohibiting prime M/WBEs from counting their own participation forecloses the only race-conscious remedy an agency can provide to prime contractors to reduce the race-based and gender-based barriers to their obtaining work. There is little doubt that it is even more difficult for M/WBEs to move into the prime role than to obtain subcontracts (as amply documented in this Report and other disparity studies). Therefore, forcing M/WBEs that can perform as prime vendors to subcontract what they would otherwise selfperform not only leaves them at the mercy of the marketplace that is infected with discrimination and with no benefit from participating in the program, but also would increase their costs of performing City work.

- Only count work to be performed in those industry codes in which the MBE or WBE is certified. Not only does this help to ensure integrity in the implementation of the program by foreclosing "front" companies and pass throughs at bid time and supporting evaluation of firms' CUF during performance, but it also creates clear standards that all parties must follow.
- Revise the standards for evaluating a bidder's GFEs to meet contract goals.
- Adopt flexible remedies for Program violations. The current structure of specified fines for particular violations may be overly rigid under the strict scrutiny standard. We suggest that infractions or contract breaches be considered on a case-by-case basis to ensure that the civil penalty is not overly burdensome under the *Croson* standard.

d. Adopt a Mentor-Protégé Program

There was broad support among M/WBEs, large prime vendors and City staff for a mentor-protégé program to increase M/WBEs' capabilities and foster relationships. While many mentor-protégé programs across the country focus on construction (perhaps in part because of the longer history of programs in this sector), technology sectors and professional services should also be included. We suggest modeling a new initiative after the successful programs approved by the U.S. Department of Transportation. These programs provide support for M/WBEs while incentivizing the mentor to provide the types of assistance targeted to the protégé to produce identified and achievable goals.¹⁷ Program elements must be clearly

^{17.} See 49 C.F.R. Part 26, Appendix D, "Mentor-Protégé Guidelines".

spelled out so as not to impinge on the independence of the certified firm or raise concerns about whether it is performing a CUF.

e. Develop Performance Measures for Program Success

The City should develop quantitative and qualitative performance measures for M/WBEs and the overall success of the Program to evaluate its effectiveness in reducing the systemic barriers identified in this Report. In addition to meeting the overall, annual goals, possible benchmarks might be:

- The number of bids or proposals, the industry and the dollar amount of the awards and the goal shortfall, where the bidder was unable to meet the goal and submitted GFEs to do so.
- The number, dollar amount and the industry code of bids or proposals rejected as non-responsive for failure to make GFEs to meet the goal.
- The number, industry and dollar amount of M/WBE substitutions during contract performance.
- Increased bidding by certified firms as prime vendors.
- Increased prime contract awards to certified firms.
- Increased M/WBE bonding limits, size of jobs, profitability, complexity of work, etc.
- Increased variety in the industries in which minority-owned and woman-owned firms are awarded prime contracts and subcontracts.

In addition, departments could receive an annual or even quarterly "scorecard" on their progress towards meeting the overall, annual aspirational City goal. Such a scorecard would have to take account of the fact that different departments procure different goods and services so that the result is tailored to the specifics of each department's contracting activities.

Development and tracking of new metrics may require additional software.

f. Continue to Conduct Regular CBI Program Reviews

The City adopted a sunset date for the current Ordinance, and we suggest this approach be continued. Data should be reviewed approximately every five to six years, to evaluate whether race-based and gender-based barriers have been reduced such that affirmative efforts are no longer needed. If such measures are necessary, then the City must ensure that they remain narrowly tailored.

II. LEGAL STANDARDS FOR LOCAL GOVERNMENT CONTRACTING EQUITY PROGRAMS

A. Summary of Constitutional Equal Protection Standards

To be effective, enforceable, and legally defensible, a race-conscious procurement program that is designed to promote equity in public sector contracting, such as the one adopted by the City of Charlotte ("City"), must meet the judicial test of constitutional "strict scrutiny".¹⁸ Strict scrutiny constitutes the highest level of judicial review.¹⁹ Strict scrutiny analysis is comprised of two prongs:

- 1. The government must establish its "compelling interest" in remediating race discrimination by current "strong evidence" of the persistence of discrimination. Such evidence may consist of the entity's "passive participation" in a system of racial exclusion.
- 2. Any remedies adopted must be "narrowly tailored" to that discrimination; the program must be directed at the types and depth of discrimination identified.²⁰

The compelling governmental interest prong has been met through two types of proof:

- 1. Quantitative or statistical evidence of the underutilization of minority-owned or woman-owned firms by the governmental agency and/or throughout the governmental agency's geographic and industry market area compared to their availability in the market area.
- 2. Qualitative or anecdotal evidence of race-based or gender-based barriers to the full and fair participation of minority-owned and woman-owned firms in the market area or in seeking contracts with the governmental agency.²¹

^{18.} City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989).

^{19.} Strict scrutiny is used by courts to evaluate governmental action that classifies persons on a "suspect" basis, such as race. It is also used in actions purported to infringe upon fundamental rights. Legal scholars frequently note that strict scrutiny constitutes the most rigorous form of judicial review. *See, for example,* Richard H. Fallon, Jr., *Strict Judicial Scrutiny*, 54 UCLA Law Review 1267, 1273 (2007).

^{20.} Croson, 488 U.S. at 510; H.B. Rowe Co., v. W. Lyndo Tippett, NCDOT, 615 F. 3d 233, 243 (4th Cir. 2010).

^{21.} Id. at 509.

Anecdotal data can consist of interviews, surveys, public hearings, academic literature, judicial decisions, legislative reports, and other information.

The narrow tailoring prong has been met by satisfying the following five factors. These elements ensure that the remedy "fits" the evidence:

- 1. The necessity of relief;²²
- 2. The efficacy of race-neutral remedies at overcoming identified discrimination;²³
- 3. The flexibility and duration of the relief, including the availability of waiver provisions;²⁴
- 4. The relationship of numerical goals to the relevant labor market;²⁵ and
- 5. The impact of the relief on the rights of third parties.²⁶

In Adarand v. Peña,²⁷ the United States Supreme Court extended the analysis of strict scrutiny, the most exacting standard of review, to race-conscious federal enactments such as the United States Department of Transportation ("USDOT") Disadvantaged Business Enterprise ("DBE") program for federally assisted transportation contracts. Similar to the local government context, the national legislature must have a compelling governmental interest for the use of race, and the remedies adopted must be narrowly tailored to that evidence.^{28,29}

Most federal courts, including the Fourth Circuit,³⁰ have subjected preferences for Woman-Owned Business Enterprises ("WBEs") to "intermediate scrutiny".³¹ The Fourth Circuit has ruled that the intermediate scrutiny standard is met by showing

^{22.} *Id*. at 507.

^{23.} United States v. Paradise, 480 U.S. 149, 171 (1987).

^{24.} Id.

^{25.} Id.

^{26.} Croson, 488 U.S. at 506.

^{27.} Adarand Constructors, Inc. v. Peña, 515 U.S. 200 (1995) ("Adarand III").

^{28.} See, for example, Croson, 488 U.S. at 492-493; Adarand III, 515 U.S. at 227; see generally Fisher v. University of Texas, 133 S. Ct. 2411 (2013).

^{29.} Programs that fail to satisfy the constitutional strict scrutiny standard generally fail to meet the compelling government interest requirement, the narrow tailoring requirement, or both. Affirmative action programs are among the most heavily litigated issues involving race and the United States Constitution. Nonetheless, many of these programs meet both prongs, particularly those based upon solid statistical and anecdotal data. *See*, Mary J. Reyburn, *Strict Scrutiny Across the Board: The Effect of Adarand Constructors, Inc. v. Pena on Race-Based Affirmative Action Programs*, 45 Catholic University L. Rev. 1405, 1452 (1996).

^{30.} W.H. Scott Construction Co., Inc., v. City of Jackson, Mississippi, 199 F.3d 206, 215 n.9 (5th Cir. 1999).

^{31.} See, e.g., Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore and Maryland Minority Contractors Ass'n, 83 F. Supp. 2d 613, 620 (D. Md. 2000) ("Baltimore I"); W.H. Scott Construction, 199 F.3d at 206, 215; Engineering Contractors Ass'n of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 907-911 (11th Cir. 1997) ("Engineering Contractors II"); Concrete Works of Colorado, Inc. v. City and County of Denver, 36 F.3d 1513, 1519 (10th Cir. 1994) ("Concrete Works II"); Contractors Ass'n of Eastern Pennsylvania v. City of Philadelphia, 6 F.3d 990, 1009-1011 (3rd Cir. 1993) ("Philadelphia II"); Coral Construction Co. v. King County, 941 F.2d 910, 930-931 (9th Cir. 1991).

that the discriminatory means employed are substantially related to the achievement of those objectives.³² Gender-based classifications must be supported by an "exceedingly persuasive justification" and be "substantially related to the objective".³³ The quantum of evidence necessary to satisfy intermediate scrutiny is less than that required to satisfy strict scrutiny. However, appellate courts have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program³⁴ or have held that the results would be the same under strict scrutiny.³⁵

Classifications not based upon a suspect class (race, ethnicity, religion, national origin or gender) are subject to the lesser standard of review referred to as "rational basis" scrutiny.^{36,37} The courts have held there are no equal protection implications under the Fourteenth Amendment of the United States Constitution for groups not subject to systemic discrimination.³⁸ In contrast to strict scrutiny and to intermediate scrutiny, rational basis means the governmental action or statutory classification must be "rationally related" to a "legitimate" government interest.³⁹

The strict scrutiny standard is a substantial burden but not automatically fatal in fact. A governmental agency need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary to the discrimination. It may meet its burden by relying on a significant statistical disparity between the availability of qualified, willing, and able minority subcontractors. The courts further require that such evidence be "corroborated by significant anecdotal evidence of racial discrimination."⁴⁰

Unlike most legal challenges, the government defendant bears the initial burden of producing "strong evidence" in support of its race-conscious program.⁴¹ As held by the Fourth Circuit,⁴² the plaintiff must then proffer evidence to rebut the gov-

^{32.} *H.B. Rowe,* 615 F. 3d 233, 242 (4th Cir. 2010).

^{33.} *Cf. United States v. Virginia*, 518 U.S. 515, 532 n.6 (1996).

^{34.} Northern Contracting, Inc. v. Illinois Department of Transportation, 473 F.3d 715, 720 (7th Cir. 2007), ("Northern Contracting III").

^{35.} Western States Paving Co., Inc. v. Washington Department of Transportation, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

^{36.} Coral Construction, 941 F. 2d at 921; see generally Equality Foundation v. City of Cincinnati, 128 F. 3d 289 (6th Cir. 1997).

^{37.} The Supreme Court first introduced this level of scrutiny in *Nebbia v. New York*, 291 U.S. 502, 537 (1934). The Court held that if laws passed have a reasonable relationship to a proper legislative purpose and are neither arbitrary nor discriminatory, the requirements of due process are satisfied.

^{38.} See generally United States v. Carolene Products Co., 304 U.S. 144 (1938).

^{39.} Heller v. Doe, 509 U.S. 312, 320 (1993).

^{40.} H.B. Rowe, 615 F. 3d at 241, quoting Maryland Troopers Association, Inc. v. Evans, 993 F.2d 1072, 1077 (4th Cir. 1993).

^{41.} *Aiken v. City of Memphis*, 37 F.3d 1155, 1162 (6th Cir. 1994).

ernment's case, and bears the ultimate burden of production and persuasion that the race-conscious program is unconstitutional.⁴³ "[W]hen the proponent of a race-conscious plan produces sufficient evidence to support an inference of discrimination, the plaintiff must rebut that inference in and the utilization of such subcontractors by the governmental entity or its prime contractors in order to prevail."⁴⁴

A plaintiff "cannot meet its burden of proof through conjecture and unsupported criticism of [the government's] evidence."⁴⁵ To successfully rebut the government's evidence, a plaintiff must introduce "credible, particularized evidence" that rebuts the government's showing of a strong basis in evidence.⁴⁶ For example, in the challenge to the Minnesota and Nebraska DBE programs, "plaintiffs presented evidence that the data was susceptible to multiple interpretations, but they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to, and participation in, federally assisted highway contracts. Therefore, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground."⁴⁷ When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.⁴⁸ A plaintiff cannot rest upon general criticisms of studies or other related evidence; it must meet its burden that the government's proof is inadequate to meet strict scrutiny, rendering the legislation or government program illegal.⁴⁹

To meet strict scrutiny, studies such as those listed in the recent U.S. Department of Justice Report, ⁵⁰ as well as this Report, have been conducted to gather the statistical and anecdotal evidence necessary to support the use of race-conscious and gender-conscious measures to combat discrimination. These are commonly referred to as "disparity studies" because they analyze any disparities between the

^{42.} See generally Podberesky v. Kirwan, 38 F. 3d 147 (4th Cir. 1994); H.B Rowe, 615 F.3d at 233.

^{43.} See, e.g., Baltimore I, 83 F. Supp. 2d at 613, 620; W.H. Scott Construction, 199 F.3d at 206, 215; Engineering Contractors II, 122 F. 3d at 895, 907-911; Concrete Works II, 36 F.3d at 1513, 1519; Philadelphia II, 6 F. 3d at 990, 1009-1011; Coral Construction, 941 F. 2d at 910, 930-931.

^{44.} Engineering Contractors II, 122 F.3d at 916.

^{45.} *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 989 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (10th Cir. 2003) (*"Concrete Works IV"*).

^{46.} *H.B. Rowe*, 615 F.3d at 241-242; *Midwest Fence Corp. v. U.S. Department of Transportation, Illinois Department of Transportation, Illinois State Toll Highway Authority,* 84 F. Supp. 3d 705 (N.D. III. 2015) ("*Midwest Fence I*"), aff'd 840 F.3d 932 (7th Cir. 2016) ("*Midwest Fence II*").

^{47.} Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F.3d. 964, 970 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004).

^{48.} Coral Construction, 941 F. 2d at 921; Engineering Contractors II, 122 F.3d at 916.

^{49.} Adarand VII, 228 F.3d at 1166; Engineering Contractors II, 122 F.3d at 916; Concrete Works II, 36 F.3d at 1513, 1522-1523 ; Webster v. Fulton County, Georgia, 51 F.Supp.2d 1354, 1364 (N.D. Ga. 1999), aff'd per curiam, 218 F. 3d 1267 (11th Cir. 2000); see also Wygant v. Jackson Board of Education, 476 U.S. 267, 277-278 (1986).

opportunities and experiences of minority-owned and woman-owned firms and their actual utilization compared to White male-owned businesses. More rigorous studies also examine the elements of the governmental agency's program to determine whether it is sufficiently narrowly tailored. However, "[t]here is no 'precise mathematical formula to assess the quantum of evidence that rises to the *Croson* 'strong basis in evidence benchmark.'"⁵¹ The following is a detailed discussion of the legal parameters and the requirements for conducting studies to support legally defensible programs.

B. Elements of Strict Constitutional Scrutiny

In its decision in *City of Richmond v. J.A. Croson Co.*, the United States Supreme Court established the constitutional contours of permissible race-conscious public contracting programs. Reversing long established Equal Protection jurisprudence, ⁵² the Court, for the first time, extended the highest level of judicial examination from measures designed to limit the rights and opportunities of minorities to legislation that inures to the benefit of these victims of historic, invidious discrimination. Strict scrutiny requires that a government entity prove both its "compelling governmental interest" in remediating identified discrimination based upon "strong evidence"⁵³ and that the measures adopted to remedy that discrimination are "narrowly tailored" to that evidence. However benign the government's motive, race is always so suspect a classification that its use must pass the highest constitutional test of "strict scrutiny".

The Court struck down the City of Richmond's Minority Business Enterprise Plan ("Plan") because it failed to satisfy the strict scrutiny analysis applied to "racebased" government programs. The City's "setaside" Plan required prime contractors awarded City construction contracts to subcontract at least 30% of the dollar amount of contracts to one or more Minority-Owned Business Enterprises ("MBEs").⁵⁴ A business located anywhere in the nation was eligible to participate

^{50.} A recent Report issued by the U.S. Department of Justice's Civil Rights Division, https://www.justice.gov/crt/page/file/ 1463921/download, provides a summary of recent evidence that justifies the continued appropriate use of race or sex by federal agencies to remedy the current effects of past discrimination in federal contracting programs. The Report summarizes evidence since 2010. It notes that a substantial body of quantitative and qualitative evidence demonstrates the continued pervasiveness of discriminatory barriers that impede the full and fair participation of minority- and woman-owned businesses in government contracting. The Appendices identify the congressional hearings from 2010 to 2021 that addressed challenges facing businesses owned by M/WBEs; dozens of disparity studies published between 2010 and 2021; and additional studies and documentation pertaining to the issues. In addition to discussing the cases cited in this Chapter, the report includes a summary of recent challenges to federal race-and gender-conscious COVIDrelated relief, which included several race-and gender-conscious remedial plans to assist businesses owned by women, minorities, and veterans in the restaurant and agricultural venues.

^{51.} *H.B. Rowe*, 615 F.3d 233 at 241, *quoting Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986).

^{52.} U.S. Const. Amend. XIV, §1.

^{53.} There is no precise mathematical formula to assess what rises to the level of "strong evidence".

so long as it was at least 51% owned and controlled by minority citizens or law-fully-admitted permanent residents.

The Plan was adopted following a public hearing during which no direct evidence was presented that the City had discriminated on the basis of race in contracts or that its prime contractors had discriminated against minority subcontractors. The only evidence before the City Council was: (a) Richmond's population was 50% Black, yet less than one percent of its prime construction contracts had been awarded to minority businesses; (b) local contractors' associations were virtually all White; (c) the City Attorney's opinion that the Plan was constitutional; and (d) generalized statements describing widespread racial discrimination in the local, Virginia, and national construction industries.

In affirming the court of appeals' determination that the Plan was unconstitutional, Justice Sandra Day O'Connor's plurality opinion rejected the extreme positions that local governments either have *carte blanche* to enact race-based legislation or must prove their own active participation in discrimination:

[A] state or local subdivision...has the authority to eradicate the effects of private discrimination within its own legislative jurisdiction.... [Richmond] can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment...[I] the City could show that it had essentially become a "passive participant" in a system of racial exclusion ...[it] could take affirmative steps to dismantle such a system.⁵⁵

Strict scrutiny of race-conscious remedies is required to determine whether racial classifications are in fact motivated by notions of racial inferiority or blatant racial politics. This highest level of judicial review "smokes out" illegitimate uses of race by ensuring that the legislative body is pursuing an important enough goal to warrant use of a highly suspect tool.⁵⁶ It also ensures that the means chosen "fit" this compelling goal so closely that there is little or no likelihood that the motive for the classification was illegitimate racial prejudice or stereotype. The Court made clear that strict scrutiny is designed to expose racial stigma; racial classifications are said to create racial hostility if they are based on notions of racial inferiority.

^{54.} The City described its Plan as remedial. It was enacted to promote greater participation by minority business enterprises in public construction projects.

^{55. 488} U.S. at 491-92.

^{56.} See also Grutter v. Bollinger, 539 U.S. 306, 327 (2003) ("Not every decision influenced by race is equally objectionable, and strict scrutiny is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decisionmaker for the use of race in that particular context.").

Richmond's evidence was found to be lacking in every respect.⁵⁷ The City could not rely upon the disparity between its utilization of MBE prime contractors and Richmond's minority population because not all minority persons would be qualified to perform construction projects; general population representation is irrelevant. No data were presented about the availability of MBEs in either the relevant market area or their utilization as subcontractors on City projects.

According to Justice O'Connor, the extremely low MBE membership in local contractors' associations could be explained by "societal" discrimination or perhaps Blacks' lack of interest in participating as business owners in the construction industry. To be relevant, the City would have to demonstrate statistical disparities between eligible MBEs and actual membership in trade or professional groups. Further, Richmond presented no evidence concerning enforcement of its own anti-discrimination ordinance. Finally, the City could not rely upon Congress' determination that there has been nationwide discrimination in the construction industry. Congress recognized that the scope of the problem varies from market to market, and, in any event, it was exercising its powers under Section Five of the Fourteenth Amendment. Local governments are further constrained by the Amendment's Equal Protection Clause.

In the case at hand, the City has not ascertained how many minority enterprises are present in the local construction market nor the level of their participation in City construction projects. The City points to no evidence that qualified minority contractors have been passed over for City contracts or subcontracts, either as a group or in any individual case. Under such circumstances, it is simply impossible to say that the City has demonstrated "a strong basis in evidence for its conclusion that remedial action was necessary."⁵⁸

This analysis was applied only to Blacks. The Court emphasized that there was "absolutely no evidence" of discrimination against other minorities. "The random inclusion of racial groups that, as a practical matter, may have never suffered from discrimination in the construction industry in Richmond, suggests that perhaps the

City's purpose was not in fact to remedy past discrimination."59

Having found that Richmond had not presented evidence in support of its compelling interest in remediating discrimination—the first prong of strict scrutiny—the Court made two observations about the narrowness of the remedy—the second prong of strict scrutiny. First, Richmond had not considered race-neutral means to increase MBE participation. Second, the 30% quota had no basis in evidence, and

^{57.} The City cited past discrimination and its desire to increase minority business participation in construction projects as the factors giving rise to the Plan.

^{58.} Croson, 488 U.S. at 510.

^{59.} Id.

was applied regardless of whether the individual MBE had suffered discrimination.⁶⁰ The Court noted that the City "does not even know how many MBEs in the relevant market are qualified to undertake prime or subcontracting work in public construction projects."⁶¹

Recognizing that her opinion might be misconstrued to eliminate all race-conscious contracting efforts, Justice O'Connor closed with these admonitions:

Nothing we say today precludes a state or local entity from taking action to rectify the effects of identified discrimination within its jurisdiction. 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. 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. Under such circumstances, the City could act to dismantle the closed business system by taking appropriate measures against those who discriminate based on race or other illegitimate criteria. In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.... Moreover, evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified.⁶²

While much has been written about *Croson*, it is worth stressing what evidence was, and was not, before the Court. First, Richmond presented *no* evidence regarding the availability of MBEs to perform as prime contractors or subcontractors and *no* evidence of the utilization of minority-owned subcontractors on City

contracts.⁶³ Nor did Richmond attempt to link the remedy it imposed to any evidence specific to the program; it used the general population of the City rather than any measure of business availability.

Some commentators have taken this dearth of any particularized proof and argued that only the most particularized proof can suffice in all cases. They leap from the Court's rejection of Richmond's reliance on only the percentage of Blacks in the City's population to a requirement that only firms that bid or have the "capacity" or "willingness" to bid on a particular contract at a particular time can

^{60.} See Grutter, 529 U.S. at 336-337 (quotas are not permitted; race must be used in a flexible, non-mechanical way).

^{61.} Croson, 488 U.S. at 502.

^{62.} Id. at 509 (citations omitted).

^{63.} *Id.* at 502.

be considered in determining whether discrimination against Black businesses infects the local economy.⁶⁴

This argument has been rejected explicitly by some courts. In denying the plaintiff's summary judgment motion to enjoin the City of New York's Minority-Owned and Woman-Owned Business Enterprise ("M/WBE") construction ordinance, the court stated:

[I]t is important to remember what the *Croson* plurality opinion did and did not decide. The Richmond program, which the *Croson* Court struck down, was insufficient because it was based on a comparison of the minority population in its entirety in Richmond, Virginia (50%) with the number of contracts awarded to minority businesses (0.67%). There were no statistics presented regarding the number of minority-owned contractors in the Richmond area, *Croson*, 488 U.S. at 499, and the Supreme Court was concerned with the gross generality of the statistics used in justifying the Richmond program. There is no indication that the statistical analysis performed by [the consultant] in the present case, which does contain statistics regarding minority contractors in New York City, is not sufficient as a matter of law under *Croson*.⁶⁵

Further, Richmond made no attempt to narrowly tailor a goal for the procurement at issue that reflected the reality of the project. Arbitrary quotas, and the unyielding application of those quotas, did not support the stated objective of ensuring equal access to City contracting opportunities. The *Croson* Court said nothing about the constitutionality of flexible goals based upon the availability of MBEs to perform the scopes of the contract in the government's local market area. In contrast, the USDOT DBE program avoids these pitfalls. 49 C.F.R. Part 26 "provides for a flexible system of contracting goals that contrasts sharply with the rigid quotas invalidated in *Croson.*"

While strict scrutiny is designed to require clear articulation of the evidentiary basis for race-conscious decision-making and careful adoption of remedies to address discrimination, it is not, as Justice O'Connor stressed, an impossible test that no proof can meet. Strict scrutiny need not be "fatal in fact".

^{64.} See, for example, Northern Contracting III, 473 F.3d at 723.

^{65.} North Shore Concrete and Associates, Inc. v. City of New York, 1998 U.S. Dist. Lexis 6785, *28-29 (E.D. N.Y. 1998); see also Harrison & Burrowes Bridge Constructors, Inc. v. Cuomo, 981 F.2d 50, 61-62 (2nd Cir. 1992) ("Croson made only broad pronouncements concerning the findings necessary to support a state's affirmative action plan"); cf. Concrete Works II, 36 F.3d at 1528 (City may rely on "data reflecting the number of MBEs and WBEs in the marketplace to defeat the challenger's summary judgment motion").

C. Establishing a "Strong Basis in Evidence" for the City of Charlotte's Program for Minority- and Woman-Owned Businesses

The case law on the U.S. Department of Transportation's DBE program should guide Charlotte's program for locally funded contracts.⁶⁶ Whether the program is called an M/WBE program or a DBE program or any other moniker, the strict scrutiny test applies. The DBE program regulations⁶⁷ have been upheld by every court⁶⁸, and local programs for Minority- and Woman-Owned Business Enterprises will be judged against the following legal framework.⁶⁹

All courts have held that Congress had strong evidence of widespread racial discrimination in the construction industry. This included:

- Disparities between the earnings of minority-owned firms and similarly situated non-minority owned firms;
- Disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners;
- The large and rapid decline in minorities' participation in the construction industry when affirmative action programs were struck down or abandoned; and
- Various types of overt and institutional discrimination by prime contractors, trade unions, business networks, suppliers, and sureties against minority contractors.⁷⁰

The regulations were facially narrowly tailored. Unlike the prior program,⁷¹ the revised Part 26 provides that:

• The overall goal must be based upon demonstrable evidence of the number of ready, willing, and able DBEs.

^{66.} The North Carolina Department of Transportation's M/WBE program largely mirrors the federal DBE program and has withstood an equal protection challenge. See Fourth Circuit case law discussion section of this Chapter.

^{67. 49} C.F.R. Part 26.

^{68.} See, for example, Midwest Fence II, 840 F.3d at 932; Northern Contracting III, 473 F.3d at 715; Associated General Contractors of America, San Diego Chapter, Inc., v. California Department of Transportation, et al., 713 F. 3d 1187, 1198 (9th Cir. 2013); Western States, 407 F.3d at 983, 994; Adarand VII, 228 F.3d at 1147; M.K. Weeden Construction v. Montana Department of Transportation, 2013 WL 4774517 (D. Mont.) (September 4, 2013).

^{69.} Midwest Fence II, 840 F.3d. at 953.

^{70.} Western States, 407 F.3d at 992-93.

^{71.} The DBE program regulation in effect prior to March of 1999 was set forth in 49 C.F.R. Part 23.

- The goal may be adjusted to reflect the availability of DBEs "but for" the effects of the DBE program and of discrimination.
- The recipient must meet the maximum feasible portion of the goal through race-neutral measures.
- The use of quotas and set asides is limited to only those situations where there is no other remedy.
- The overall, triennial goals are to be adjusted during the year to remain narrowly tailored.
- The presumption of social disadvantage for racial and ethnic minorities and women is rebuttable, "wealthy minority owners and wealthy minority firms are excluded, and certification is available to persons who are not presumptively disadvantaged but can demonstrate actual social and economic disadvantage."⁷²

It is well established that disparities between a governmental agency's utilization of M/WBEs and their availability in the relevant marketplace provide a sufficient basis for the consideration of race-conscious or gender-conscious remedies. Proof of the disparate impacts of economic factors such as access to capital and bonding on M/WBEs⁷³ and the disparate treatment of such firms by actors critical to their success will meet strict scrutiny. Discrimination must be shown using statistics and economic models to examine the effects of systems or markets on different groups, as well as by evidence of personal experiences with discriminatory conduct, policies or systems.⁷⁴ Specific evidence of discrimination or its absence may be direct or circumstantial and should include economic factors and opportunities in the private sector affecting the success of M/WBEs.⁷⁵ A stark disparity in DBE participation rates on goals and non-goals contracts, when combined with the statistical and anecdotal evidence of discrimination in the relevant marketplaces, has been held to support the use of race-conscious goals.⁷⁶

Croson's admonition that "mere societal" discrimination is not enough to meet strict scrutiny is met where the government presents evidence of discrimination in the industry targeted by the program. "If such evidence is presented, it is immaterial for constitutional purposes whether the industry discrimination springs from widespread discriminatory attitudes shared by society or is the product of policies,

75. Id.

^{72.} Sherbrooke, 345 F.3d. at 973.

^{73.} Northern Contracting, Inc. v. Illinois Department of Transportation, et al., 2005 U.S. Dist. LEXIS 19868 at *69 (Sept. 8, 2005) ("Northern Contracting II").

^{74.} Adarand VII, 228 F.3d at 1166 ("statistical and anecdotal evidence are appropriate").

^{76.} Northern Contracting II at 80 ("the stark disparity in DBE participation rates on goals and non-goals contracts, when combined with the statistical and anecdotal evidence of discrimination in the relevant marketplaces" indicates the presence of discrimination); see Croson, 488 U.S. at 492.

practices, and attitudes unique to the industry... The genesis of the identified discrimination is irrelevant." There is no requirement to "show the existence of specific discriminatory policies and that those policies were more than a reflection of societal discrimination."⁷⁷

The City need not prove that it is itself guilty of discrimination to meet its burden. In upholding Denver's M/WBE construction program, the Tenth Circuit stated that Denver can show its compelling interest by "evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination...[by] linking its spending practices to the private discrimination."⁷⁸ Denver further linked its award of public dollars to discriminatory conduct through the testimony of M/WBEs that identified general contractors who used them on Denver projects with M/WBE goals but refused to use them on private projects without goals.

The following are the necessary disparity study elements to determine the constitutional validity of race-conscious and gender-conscious local programs. Programs based upon studies similar to the methodology employed for this Report have been deemed a rich and relevant source of data and have been upheld repeatedly. This includes the availability analysis and the examination of disparities in the business formation rates and business earnings of minorities and women compared to similarly situated non-minority males.⁷⁹

1. Define the City of Charlotte's Market Area

The first step is to determine the market area in which the City operates. *Croson* states that a state or local government may only remedy discrimination within its own contracting market area. The City of Richmond was specifically faulted for including minority contractors from across the country in its program, based on national data considered by Congress.⁸⁰ Charlotte must therefore empirically establish the geographic and product dimensions of its contracting and procurement market area to ensure that the program meets strict scrutiny. This is a fact driven inquiry; it may or may not be the case that the market area is the government's jurisdictional boundaries.⁸¹ This Study employs long established economic principles to empirically establish the

^{77.} Concrete Works IV, 321 F.3d at 976.

^{78.} *Id*. at 977.

^{79.} The Illinois Department of Transportation's ("IDOT's") DBE program was upheld based on this approach combined with other economy-wide and anecdotal evidence. IDOT's plan was based upon sufficient proof of discrimination such that race-neutral measures alone would be inadequate to assure that DBEs operate on a "level playing field" for government contracts. *Northern Contracting III*, 473 F.3d at 720. The USDOT's institutional guidance for Part 26 refers approvingly to this case. https://www.transportation.gov/sites/dot.gov/files/docs/Western_States_Paving_Company_Case_Questions_and_Answers.pdf.

^{80.} Croson, 488 U.S. at 508.

^{81.} Concrete Works II, 36 F.3d at 1520 (to confine data to strict geographic boundaries would ignore "economic reality").

City's geographic and product market area to ensure that any program based on the Study satisfies strict scrutiny.

A commonly accepted definition of geographic market area for disparity studies is the locations that account for at least 75% of the agency's contract and subcontract dollar payments.⁸² Likewise, the accepted approach is to analyze those detailed industries that make up at least 75% of the prime contract and associated subcontract payments for the Study period.⁸³ This produces the utilization results within the geographic market area.⁸⁴

2. Determine the City of Charlotte's Utilization of Minority-Owned and Woman-Owned Businesses

The Study should next determine the City's utilization of M/WBEs in its market area. Generally, this analysis should be limited to formally procured contracts, since it is unlikely that it is realistic or useful to set goals on small dollar purchases. Developing the file for analysis involves the following steps, regardless of funding source:

- 1. Develop the Initial Contract Data File. This involves first gathering the City's records of its payments to prime contractors, and if available, associated subcontractors.
- 2. Develop the Sample Contract Data File, if necessary. If the Initial Contract Data File is too large to complete all the missing contract records, a sample should be drawn. Standard statistical procedures should be utilized that result in a sample whose basic parameters (distribution of the number of contracts and the value of contract dollars) mirror the broad industry sectors (*i.e.*, construction; construction-related services; goods; and services) in the Initial Contract Data File. In addition, the total number of contracts must allow for a statistically representative sample at the 95% confidence level and a five percent confidence interval. These parameters are the norm in statistical sample procedures.
- 3. Develop the Final Contract Data File. Whatever data are missing (often race and gender ownership, North American Industry Classification System ("NAICS") or other industry codes, work descriptions or other important information not collected by the agency) must be fully reconstructed by the consultant. While painstaking and labor intensive, this step cannot be skipped. Using surveys is unlikely to yield sufficient

83. *Id*.

^{82.} J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, National Academies of Sciences, Engineering, and Medicine, 2010 ("*National Disparity Study Guidelines*").

^{84.} See National Disparity Study Guidelines, at 29-30. For this Report, we found the City's market area to be the state of North Carolina and York County, South Carolina Please see Chapter IV.

data, and so each contract must be examined, and the record completed to ensure a full and accurate picture of the agency's activities. It is also important to research whether a firm that has an address outside the market area has a location in the market area (contract records often have far flung addresses for payments). All necessary data for at least 80% of the contract dollars in the final contract data files should be collected to ensure a comprehensive file that mirrors the City's contracting and procurement activities.

3. Determine the Availability of Minority-Owned and Woman-Owned Businesses in the City of Charlotte's Market Area

Next, the Study must estimate the availability of minorities and women in the City's market area to participate in the City's contracts as prime contractors and associated subcontractors. Based on the product and geographic utilization data, the Study should calculate unweighted and weighted M/WBE availability estimates of ready, willing and able firms in the City's market. These results will be a narrowly tailored, dollar-weighted average of all the underlying industry availability numbers; larger weights will be applied to industries with relatively more spending and lower weights applied to industries with relatively less spending. The availability figures should be sub-divided by race, ethnicity, and gender.

The availability analysis involves the following steps:

- 1. The development of the Merged Business Availability List. Three data sets are used to develop the Merged Business Availability List:
 - The firms in the M/W/DBE Master Directory developed for the City. This methodology includes both certified firms and non-certified firms owned by minorities or women.⁸⁵ The Master Directory consists of all available government and private directories, limited to firms within the City's geographic and product market.
 - The firms contained in the City's contract data files. This will require the elimination of any duplications because a firm might have received more than one contract for work in a given NAICS code during the Study period.
 - Firms extracted from the Dun & Bradstreet MarketPlace/Hoovers database, using the relevant geographic and product market definitions.

^{85.} *Id*. at 33-34.

- 2. The estimation of unweighted availability. The Merged Business Availability List will be the available universe of relevant firms for the Study. This process will significantly improve the identification of minority-owned and woman-owned businesses in the business population. Race and sex must be assigned to any firm not already classified.⁸⁶ This will produce estimates of minority-owned and womanowned business availability in markets for each NAICS code in the product market; for woman and minority business availability for all NAICS codes combined; and for the broad industry categories of goods, services and construction. The detailed results should also be the basis for contract specific goal setting methodology.
- 3. The estimation of weighted availability. Using the weights from the utilization analysis, the unweighted availability should be adjusted for the share of spending in each NAICS code. The unweighted availability determination will be weighted by the share of dollars the agency actually spends in each NAICS code, derived from the utilization analysis. These resulting weighted availability estimates will be used in the calculation of disparity indices for contracts.

This adjustment is important for two reasons. First, disparity analyses compare utilization and availability. The utilization metrics are shares of dollars. The unweighted availability metrics are shares of firms. In order to make comparable analyses, the dollar shares are used to weight the unweighted availability. Second, any examination of the overall usage of available firms must be conducted with an understanding of what NAICS codes received what share of agency spending. Absent this, a particular group's availability share (high or low) in an area of low spending would carry equal weight to a particular group's availability share (high or low) in an area of large spending.

This three-part methodology for estimating availability is usually referred to as the "custom census" approach with refinements. This approach is favored for several reasons. As recognized by the courts and the *National Disparity Study Guidelines*,⁸⁷ this methodology in general is superior to other methods for at least four reasons.

• First, it provides an internally consistent and rigorous "apples to apples" comparison between firms in the availability numerator and those in the denominator. Other approaches often have different definitions for the

^{86.} We note this is an improvement over the approach described in the *National Disparity Study Guidelines*, which recommended a survey to assign classifications. While it is more labor intensive to actually assign race, gender and industry code to each firm than using a mathematical formula derived from survey results, it greatly improves the accuracy of the assignments, resulting in more narrowly tailored results.

^{87.} National Disparity Study Guidelines, at 57-58.

firms in the numerator (*e.g.*, certified M/WBEs or firms that respond to a survey) and the denominator (*e.g.*, registered vendors or the Census Bureau's County Business Patterns data).

- Second, by examining a comprehensive group of firms, it "casts a broader net" beyond those known to the agency. As held by the federal court of appeals in finding the Illinois Department of Transportation's program to be constitutional, the "remedial nature of [DBE programs] militates in favor of a method of M/W/SBE and DBE availability calculation that casts a broader net" than merely using bidders lists or other agency or government directories. A broad methodology is also recommended by the USDOT for the federal DBE program, which has been upheld by every court.⁸⁸ A custom census is less likely to be tainted by the effects of past and present discrimination than other methods, such as bidders lists, because it seeks out firms in the agency's market areas that have not been able to access its opportunities.
- Third, this approach is less impacted by variables affected by discrimination. Factors such as firm age, size, qualifications, and experience are all elements of business success where discrimination would be manifested. Several courts have held that the results of discrimination which impact factors affecting capacity should not be the benchmark for a program designed to ameliorate the effects of discrimination. They have acknowledged that minority-owned and woman-owned firms may be smaller, newer, and otherwise less competitive than non-M/WBEs because of the very discrimination sought to be remedied by race-conscious contracting programs. Racial and gender differences in these "capacity" factors are the *outcomes* of discrimination, and it is therefore inappropriate as a matter of economics and statistics to use them as "control" variables in a disparity study.⁸⁹
- Fourth, this methodology has been upheld by every court that has reviewed it, including the failed challenge to the Illinois Department of Transportation's DBE program⁹⁰ and the more recent successful defense of the Illinois State Toll Highway's DBE program.⁹¹

Other methodologies relying only on vendor or bidder lists may overstate or understate availability as a proportion of the City's actual markets because they reflect only the results of the governmental agency's own activities, not

^{88.} See Tips for Goal Setting in the Disadvantaged Business Enterprise (DBE) Program, https://www.transportation.gov/sites/ dot.gov/files/docs/Tips_for_Goal-Setting_in_DBE_Program_20141106.pdf.

^{89.} For a detailed discussion of the role of capacity in disparity studies, see the National Disparity Study Guidelines, Appendix B, "Understanding Capacity".

^{90.} Northern Contracting III, 473 F.3d at 721.

^{91.} See generally Midwest Fence II, 840 F.3d at 932; Northern Contracting III, 473 F.3d 715.

an accurate portrayal of marketplace behavior. Other methods of whittling down availability by using assumptions based on surveys with limited response rates or guesses about firms' capacities easily lead to findings that womanowned and minority-owned businesses no longer face discrimination or are unavailable, even when the firm is actually working on agency contracts.

Many plaintiffs have tried to argue that studies must somehow control for "capacity" of M/WBEs to perform specific agency contracts. The definition of "capacity" has varied based upon the plaintiff's particular point of view, but it has generally meant firm age, firm size (full time employees), firm revenues, bonding limits and prior experience on agency projects (no argument has been made outside of the construction industry).

This test has been rejected by the courts when directly addressed by the plaintiff and the agency. As recognized by the courts and the National Disparity Study Guidelines, these capacity factors are not race-neutral and gender-neutral variables. Discriminatory barriers depress the formation rates of firms by minorities and women and the rates of success of such firms in doing business in both the private and public sectors. In a perfectly discriminatory system, M/ WBEs would have no "capacity" because they would have been prevented from developing any "capacity". That certainly would not mean that there was no discrimination or that the government must sit by helplessly and continue to award tax dollars within the "market failure" of discrimination and without recognition of systematic, institutional race-based and gender-based barriers. It is these types of "capacity" variables where barriers to full and fair opportunities to compete will be manifested. Capacity limitations on availability would import the current effects of past discrimination into the model, because if M/ WBEs are newer or smaller because of discrimination, then controlling for those variables will mask the phenomenon of discrimination that is being studied. In short, identifiable indicators of capacity are themselves impacted and reflect discrimination. The courts have agreed. Based on expert testimony, judges understand that factors such as size and experience reflect outcomes influenced by race and gender: "M/WBE construction firms are generally

smaller and less experienced *because* of discrimination."92

To rebut this framework, a plaintiff must proffer its own study showing that the disparities disappear when whatever variables it believes are important are held constant and that controlling for firm specialization explained the disparities.⁹³ Significantly, *Croson* does not "require disparity studies that measure whether construction firms are able to perform a *particular contract*."⁹⁴

^{92.} Concrete Works IV, 321 F.3d at 983 (emphasis in the original).

^{93.} Conjecture and unsupported criticism of the government are not enough. The plaintiff must rebut the government's evidence and introduce "credible, particularized evidence" of its own. *See Midwest Fence II*, 840 F.3d at 942 (upholding the Illinois Tollway's program for state funded contracts modeled after Part 26 and based on CHA's expert testimony).

There are also practical reasons not to circumscribe availability through "capacity" limitations. First, there is no agreement concerning what variables are relevant or how those variables are to be measured for the purpose of examining whether race and gender barriers impede the success of minority and woman entrepreneurs. For example, a newly formed firm might be the result of the merger of much older entities or have been formed by highly experienced owners; it is unclear how such variations would shed light on the issues in a disparity study. Second, since the amount of necessary capacity will vary from contract to contract, there is no way to establish universal standards that would satisfy the capacity limitation. Third, firms' capacities are highly elastic. Businesses can add staff, rent equipment, hire subcontractors or take other steps to be able to perform a particular scope on a particular contract. Whatever a firm's capacity might have been at the time of the Study, it may well have changed by the time the agency seeks to issue a specific solicitation. Fourth, there are no reliable data sources for the type of information usually posited as important by those who seek to reduce availability estimates using capacity factors. While a researcher might have information about firms that are certified as M/WBEs or that are pregualified by an agency (which usually applies only to construction firms), there is no database for that information for non-certified firms, especially White male-owned firms that usually function as subcontractors. Any adjustment to the numerator (M/WBEs) must also be made to the denominator (all firms), as a researcher cannot assume that all White male-owned firms have adequate capacity but that M/WBEs do not.

Capacity variables should be examined at the economy-wide level of business formation and earnings, discussed in Chapter V, not at the first stage of the analysis. To import these variables into the availability determination would confirm the downward bias that discrimination imposes on M/WBEs' availability and the upward bias enjoyed by non-M/WBEs. These factors should also be explored during anecdotal data collection, discussed in Chapter VI. They are also relevant to contract goal setting, where the agency must use its judgment about whether to adjust the initial goal that results from the Study data based on current market conditions and current firm availability, discussed in Chapter IV.

4. Examine Disparities between the City of Charlotte's Utilization of Minority-Owned and Woman-Owned Businesses and the Availability of Minority-Owned and Woman-Owned Businesses

A disparity study for a local government must analyze whether there are statistically significant disparities between the availability of M/WBEs and their utilization on agency contracts.

^{94.} Croson, 488 U.S. at 508 (emphasis in the original).

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.... In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.⁹⁵

This is known as the "disparity ratio" or "disparity index". A disparity ratio measures the participation of a group in the government's contracting opportunities by dividing that group's utilization by the availability of that group and multiplying that result by 100. Courts have looked to disparity indices in determining whether strict scrutiny is satisfied.⁹⁶ An index of less than 100% indicates that a given group is being utilized less than would be expected based on its availability.

The courts have held that disparity results must be analyzed to determine whether the results are "significant". There are two distinct methods to measure a result's significance. First, a "large" or "substantively significant" disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. This is based on the Equal Employment Opportunity Commission's "Eighty Percent Rule" that a ratio less than 80% presents a *prima facie* case of discrimination by supporting the inference that the result may be caused by the disparate impacts of discrimination.⁹⁷ Second, statistically significant disparity means that an outcome 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.⁹⁸ A more in-depth discussion of statistical significance is provided in Appendix C.

In addition to creating the disparity ratio, correct measures of availability are necessary to determine whether discriminatory barriers depress the formation of firms by minorities and women, and the success of such firms in doing business in both the private and public sectors, known as an "economy-wide" disparity analysis.⁹⁹

^{95.} Croson, 488 U.S. at 509; see Webster, 51 F.Supp.2d at 1363, 1375.

^{96.} W. H. Scott Construction, 199 F.3d at 218; see also Concrete Works II, 36 F.3d at 1526-1527; O'Donnell Construction Co., Inc, v. State of Columbia, 963 F.2d 420, 426 (D.C. Cir. 1992); Cone Corporation v. Hillsborough County, 908 F.2d 908, 916 (11th Cir. 1990), cert. denied, 498 U.S. 983 (1990).

^{97. 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."); see Engineering Contractors II, 122 F3d at 914.

^{98.} A chi-square test – examining if the utilization rate was different from the weighted availability - is used to determine the statistical significance of the disparity ratio.

The City need not prove that the statistical inferences of discrimination are "correct". In upholding Denver's M/WBE Program, the Tenth Circuit noted that strong evidence supporting Denver's determination that remedial action was necessary need not have been based upon "irrefutable or definitive" proof of discrimination. Statistical evidence creating inferences of discriminatory motivations was sufficient and therefore evidence of market area discrimination was properly used to meet strict scrutiny. To rebut this type of evidence, the plaintiff must prove by a preponderance of the evidence that such proof does not support those inferences.¹⁰⁰

Nor must the City demonstrate that the "ordinances will *change* discriminatory practices and policies" in the local market area; such a test would be "illogical" because firms could defeat the remedial efforts simply by refusing to cease discriminating.¹⁰¹

The City need not prove that private firms directly engaged in any discrimination in which the government passively participates do so intentionally, with the purpose of disadvantaging minorities and women.

Denver's only burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and link its spending to that discrimination.... Denver was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. To impose such a burden on a municipality would be tantamount to requiring proof of discrimination and would eviscerate any reliance the municipality could place on statistical studies and anecdotal evidence.¹⁰²

Similarly, statistical evidence by its nature cannot identify the individuals responsible for the discrimination; there is no need to do so to meet strict scrutiny, as opposed to an individual or class action lawsuit.¹⁰³

^{99.} Northern Contracting II, 2005 U.S. Dist. LEXIS 19868 at *69 (IDOT's custom census approach was supportable because "discrimination in the credit and bonding markets may artificially reduce the number of M/WBEs").

^{100.} Concrete Works IV, 321 F. 3d at 971.

^{101.} Id. at 973 (emphasis in the original).

^{102.} *Id*. at 971.

^{103.} *Id*. at 973.

5. Analyze Economy-Wide Evidence of Race-Based and Gender-Based Disparities in the City of Charlotte's Market Area

The courts have repeatedly held that analysis of disparities in the rates at which M/WBEs in the government's markets form businesses compared to similar non-M/WBEs, their earnings from such businesses, and their access to capital markets are highly relevant to the determination of whether the market functions properly for all firms regardless of the race or gender of their ownership. These analyses contributed to the successful defense of Chicago's construction program.¹⁰⁴ As similarly explained by the Tenth Circuit, this type of evidence

demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination, precluding from the outset competition for public construction contracts by minority enterprises. The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination, precluding existing minority firms from effectively competing for public construction contracts. The government also presents further evidence in the form of local disparity studies of minority subcontracting and studies of local subcontracting markets after the removal of affirmative action programs.... The government's evidence is particularly striking in the area of the race-based denial of access to capital, without which the formation of minority subcontracting enterprises is stymied.¹⁰⁵

Business discrimination studies and lending formation studies are relevant and probative because they show a strong link between the disbursement of public funds and the channeling of those funds due to private discrimination. "Evidence that private discrimination results in barriers to business formation is relevant because it demonstrates that M/WBEs are precluded *at the outset* from competing for public construction contracts. Evidence of barriers to fair competition is also relevant because it again demonstrates that *existing* M/WBEs are precluded from competing for public contracts."¹⁰⁶ Despite the

^{104.} Builders Ass'n of Greater Chicago v. City of Chicago, 298 F. Supp.2d 725, 740 (N.D. III. 2003) ("BAGC v. Chicago").

^{105.} *Adarand VII*, 228 F.3d at 1147, 1167-68.

contentions of plaintiffs that possibly dozens of factors might influence the ability of any individual to succeed in business, the courts have rejected such impossible tests and held that business formation studies are not flawed because they cannot control for subjective descriptions such as "quality of education", "culture" and "religion".¹⁰⁷

For example, in unanimously upholding the DBE Program for federal-aid transportation contracts, the courts agree that disparities between the earnings of minority-owned firms and similarly situated non-minority-owned firms and the disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners are strong evidence of the continuing effects of discrimination.¹⁰⁸ The Eighth Circuit Court of Appeals took a "hard look" at the evidence Congress considered, and concluded that the legislature had

spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry. In rebuttal, [the plaintiffs] presented evidence that the data were susceptible to multiple interpretations, but they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts. Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.¹⁰⁹

This analysis is especially useful for an agency such as Charlotte which has been implementing a race-conscious and gender-conscious program for many years, which might partially ameliorate market wide barriers through the use of contracting diversity tools.

^{106.} *Id*.

^{107.} Concrete Works IV, 321 F.3d at 980.

^{108.} *Id.*; Western States, 407 F.3d at 993; Northern Contracting, Inc. v. Illinois Department of Transportation, 2004 U.S. Dist. LEXIS 3226 at *64 (N.D. Ill., Mar. 3, 2004) ("Northern Contracting I").

^{109.} *Sherbrooke*, 345 F.3d. at 970; *see also, Adarand VII*, 228 F.3d at 1175 (Plaintiff has not met its burden "of introducing credible, particularized evidence to rebut the government's initial showing of the existence of a compelling interest in remedying the nationwide effects of past and present discrimination in the federal construction procurement subcontracting market.").

6. Evaluate Anecdotal Evidence of Race-Based and Gender-Based Barriers to Equal Opportunities in the City of Charlotte's Market Area

A study should further explore anecdotal evidence of experiences with discrimination in contracting opportunities because it is relevant to the question of whether observed statistical disparities are due to discrimination and not to some other non-discriminatory cause or causes. As observed by the United States Supreme Court, anecdotal evidence can be persuasive because it "brought the cold [statistics] convincingly to life."¹¹⁰ Testimony about discrimination practiced by prime contractors, bonding companies, suppliers, and lenders has been found relevant regarding barriers both to minority firms' business formation and to their success on governmental projects.¹¹¹ While anecdotal evidence is insufficient standing alone. "[p]ersonal accounts of actual discrimination or the effects of discriminatory practices may, however, vividly complement empirical evidence. Moreover, anecdotal evidence of a [government's] institutional practices that exacerbate discriminatory market conditions are [sic] often particularly probative."¹¹² "[W]e do not set out a categorical rule that every case must rise or fall entirely on the sufficiency of the numbers. To the contrary, anecdotal evidence might make the pivotal difference in some cases; indeed, in an exceptional case, we do not rule out the possibility that evidence not reinforced by statistical evidence, as such, will be enough."¹¹³

There is no requirement that anecdotal testimony be "verified" or corroborated, as befits the role of evidence in legislative decision-making as opposed to judicial proceedings. "Plaintiff offers 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 – 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' perception."¹¹⁴

Likewise, the Tenth Circuit held that "Denver was not required to present corroborating evidence and [plaintiff] was free to present its own witnesses to

^{110.} International Brotherhood of Teamsters v. United States, 431 U.S. 324, 399 (1977).

^{111.} Adarand VII, 228 F.3d at 1167-1168.

^{112.} Concrete Works II, 36 F.3d at 1520,1530.

^{113.} Engineering Contractors of South Florida v. Metropolitan Dade County, 943 F. Supp. 1546 (S.D. Fla. 1996) ("Engineering Contractors I") 488 U.S. 488 U.S. This case is one of the leading lower court cases on the sufficiency of anecdotal evidence to meet the compelling interest requirement. The record contained anecdotal complaints of discrimination by M/WBEs which described incidents in which suppliers quoted higher prices to M/WBEs than to their non-M/WBE competitors, and in which non-M/WBE prime contractors unjustifiably replaced the M/WBE subcontractor with a non-M/WBE subcontractor.

^{114.} Id. at 1579-1580.

either refute the incidents described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry."¹¹⁵

D. Narrowly Tailoring a M/WBE Program for the City of Charlotte

Even if the City has a strong basis in evidence to believe that race-conscious measures are needed to remedy identified discrimination, the program must still be narrowly tailored to that evidence. As discussed above, programs that closely mirror those of the USDOT DBE Program¹¹⁶ have been upheld using that framework.¹¹⁷ The courts have repeatedly examined the following factors in determining whether race-conscious remedies are narrowly tailored to achieve their purpose:

- The necessity of relief; ¹¹⁸
- The efficacy of race-neutral and gender-neutral remedies at overcoming identified discrimination;¹¹⁹
- The relationship of numerical benchmarks for government spending to the availability of minority-owned and woman-owned firms and to subcontracting goal setting procedures;¹²⁰
- The flexibility of the program requirements, including the provision for good faith efforts to meet goals and contract specific goal setting procedures;¹²¹
- The relationship of numerical goals to the relevant market;¹²²
- The impact of the relief on third parties;¹²³ and
- The over-inclusiveness of racial classifications.¹²⁴

^{115.} Concrete Works IV, 321 F.3d at 989.

^{116. 49} C.F.R. Part 26.

^{117.} See, e.g., Midwest Fence II, 840 F.3d at 953 (upholding the Illinois Tollway's program for state funded contracts modelled after Part 26 and based on CHA's expert testimony).

^{118.} Croson, 488 U.S at 507; Adarand III, 515 U.S. at 237-238.

^{119.} Paradise at 171.

^{120.} Id.

^{121.} Id.

^{122.} Id.

^{123.} Croson, 488 U.S. at 506.

^{124.} Paradise, 480 U.S. at 171 ; see also, Sherbrooke, 345 F.3d at 971-972.

1. Consider Race-Neutral and Gender-Neutral Remedies

Race-neutral and gender-neutral approaches are necessary components of a defensible and effective M/WBE program¹²⁵. The failure to seriously consider such remedies has proven fatal to several programs.¹²⁶ Difficulty in accessing procurement opportunities, restrictive bid specifications, excessive experience requirements, and overly burdensome insurance and/or bonding requirements, for example, might be addressed by without resorting to the use of race or gender in its decision-making. Effective remedies include unbundling of contracts into smaller units, providing technical support, and developing programs to address issues of financing, bonding, and insurance important to all small and emerging businesses.¹²⁷ Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.¹²⁸

The requirement that the agency must meet the maximum feasible portion of the goal through race-neutral measures, as well as estimate that portion of the goal that it predicts will be met through such measures, has been central to the holdings that the DBE program regulations meet narrow tailoring.¹²⁹ The highly disfavored remedy of race-conscious decision making should be used only as a last resort.

However, strict scrutiny does not require that every race-neutral approach must be implemented and then proven ineffective before race-conscious remedies may be utilized.¹³⁰ While an entity must give good faith consideration to race-neutral alternatives, "strict scrutiny does not require exhaustion of every possible such alternative however irrational, costly, unreasonable, and unlikely to succeed such alternative might be... [S]ome degree of practicality is sub-sumed in the exhaustion requirement."¹³¹

^{125.} Croson, 488 U.S. at 507 (Richmond considered no alternatives to race-based quota); Associated General Contractors of Ohio v. Drabik, 214 F.3d 730, 738 (6th Cir. 2000) ("Drabik II"); Contractors Association of Eastern Pennsylvania v. City of Philadelphia, 91 F.3d 586, 609 (3rd Cir. 1996) ("Philadelphia III") (City's failure to consider race-neutral alternatives was particularly telling); Webster, 51 F.Supp.2d at 1380 (for over 20 years County never seriously considered race-neutral remedies); cf. Aiken, 37 F.3d at 1164 (failure to consider race-neutral method of promotions suggested a political rather than a remedial purpose).

^{126.} See, e.g., Florida A.G.C. Council, Inc. v. State of Florida, 303 F.Supp.2d 1307, 1315 (N. Dist. Fla. 2004) ("There is absolutely no evidence in the record to suggest that the Defendants contemplated race-neutral means to accomplish the objectives" of the statute.); Engineering Contractors II, 122 F.3d at 928.

^{127.} See 49 C.F.R. §26.51.0.

^{128.} Croson, 488 U.S. at 503 n.3; Webster, 51 F.Supp.2d at 1380.

^{129.} See, e.g., Sherbrooke, 345 F.3d. at 973.

^{130.} Grutter, 529 U.S. at 339.

^{131.} Coral Construction, 941 F.2d at 923.

2. Set Targeted M/WBE Goals

Numerical goals or benchmarks for M/WBE participation must be substantially related to their availability in the relevant market.¹³² For example, the DBE program rule requires that the overall goal must be based upon demonstrable evidence of the number of DBEs ready, willing, and able to participate on the recipient's federally assisted contracts.¹³³ "Though the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets. This stands in stark contrast to the program struck down in *Croson*."¹³⁴

Goals can be set at various levels of particularity and participation. The City may set an overall, aspirational goal for its annual, aggregate spending. Annual goals can be further disaggregated by race and gender. Approaches range from a single M/WBE or DBE goal that includes all racial and ethnic minorities and non-minority women,¹³⁵ to separate goals for each minority group and women.¹³⁶

Goal setting is not an absolute science. In holding the DBE regulations to be narrowly tailored, the Eighth Circuit Court of Appeals noted that "[t]hough the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets."¹³⁷ However, sheer speculation cannot form the basis for an enforceable measure.¹³⁸

It is settled case law that goals for a particular solicitation should reflect the particulars of the contract, not reiterate annual aggregate targets; goals must be contract specific. "Standard" goals are not defensible, nor should the annual aspirational goals function as a predetermined floor. Contract goals must be based upon availability of M/WBEs to perform the anticipated scopes of the contract, location, progress towards meeting annual goals, and other factors. Not only is this legally mandated, ¹³⁹ but this approach also reduces the need to conduct good faith efforts reviews, as well as the temptation to create "front" companies and sham participation to meet unreasonable con-

^{132.} Webster, 51 F.Supp.2d at 1379, 1381 (statistically insignificant disparities are insufficient to support an unexplained goal of 35% M/WBE participation in County contracts); see also Baltimore I, 83 F.Supp.2d at 621.

^{133. 49} C.F.R. §26.45 (b).

^{134.} *Id*.

^{135.} See 49 C.F.R. §26.45(h) (overall goal must not be subdivided into group-specific goals).

^{136.} See Engineering Contractors II, 122 F.3d at 900 (separate goals for Blacks, Hispanics and women).

^{137.} Sherbrooke, 345 F.3d. at 972.

^{138.} BAGC v. Chicago, 298 F. Supp.2d at 740 (City's MBE and WBE goals were "formulistic" percentages not related to the availability of firms).

^{139.} See Sherbrooke, 345 F.3d at 972; Coral Construction, 941 F.2d at 924.

tract goals. While this is more labor intensive than defaulting to the annual or standard goals, there is no option to avoid meeting the narrow tailoring standard.

3. Ensure Flexibility of Goals and Requirements

It is imperative that remedies not operate as fixed quotas.¹⁴⁰ A race-conscious and gender-conscious program must provide for contract awards to firms who fail to meet the contract goals but make good faith efforts to do so.¹⁴¹ In *Croson*, the Court refers approvingly to the contract-by-contract waivers used in the USDOT's DBE program.¹⁴² This feature has been central to the holding that the DBE program meets the narrow tailoring requirement.¹⁴³ Further, firms that meet the goals cannot be favored over those who made good faith efforts and firms that exceed the goals cannot be favored over those that did not exceed the goals.

4. Review Program Eligibility Over-Inclusiveness and Under-Inclusiveness

The over-inclusiveness or under-inclusiveness of those persons to be included in the City's program is an additional consideration and addresses whether the remedies truly target the evil identified. The "fit" between the problem and the remedy manifests in three ways: which groups to include, how to define those groups, and which persons will be eligible to be included within those groups.

The groups to include must be based upon the evidence.¹⁴⁴ The "random inclusion" of ethnic or racial groups that may never have experienced discrimination in the entity's market area may indicate impermissible "racial politics".¹⁴⁵ In striking down Cook County, Illinois' construction program, the Seventh Circuit remarked that a "state or local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian-Americans and women."¹⁴⁶ However, at least one court has

^{140.} See 49 C.F.R. §26.43 (quotas are not permitted and setaside contracts may be used only in limited and extreme circumstances "when no other method could be reasonably expected to redress egregious instances of discrimination").

^{141.} See, e.g., BAGC v. Chicago, 298 F. Supp.2d at 740 ("Waivers are rarely or never granted.... The City program is a rigid numerical quota...formulistic percentages cannot survive strict scrutiny.").

^{142.} Croson, 488 U.S. at 508; see also Adarand VII, 228 F.3d at 1181.

^{143.} See, e.g., Sherbrooke, 345 F.3d. at 972; Webster, 51 F. Supp. 2d at 1354, 1380.

^{144.} *Philadelphia II*, 6 F.3d 990, 1007-1008 (strict scrutiny requires data for each minority group; data was insufficient to include Hispanics, Asians or Native Americans).

^{145.} Webster, 51 F.Supp.2d at 1380–1381.

^{146.} Builders Association of Greater Chicago v. County of Cook, 256 F.3d 642, 646 (7th Cir. 2001) ("Cook II").

held some quantum of evidence of discrimination for each group is sufficient; *Croson* does not require that each group included in the ordinance suffer equally from discrimination.¹⁴⁷ Therefore, remedies should be limited to those firms owned by the relevant minority groups, as established by the evidence, that have suffered actual harm in the market area.¹⁴⁸

Next, the firm's owner(s) must be disadvantaged. The DBE Program's rebuttable presumptions of social and economic disadvantage, including the requirement that the disadvantaged owner's personal net worth not exceed a certain ceiling and that the firm meet the Small Business Administration's size definitions for its industry, have been central to the courts' holdings that it is narrowly tailored.¹⁴⁹ "[W]ealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptively [socially] disadvantaged but can demonstrate actual social and economic disadvantage. Thus, race is made relevant in the program, but it is not a determinative factor."¹⁵⁰ Further, anyone must be able to challenge the disadvantaged status of any firm.¹⁵¹ The certifications accepted by a local program must meet these criteria.

5. Evaluate the Burden on Third Parties

Failure to make "neutral" changes to contracting and procurement policies and procedures that disadvantage M/WBEs and other small businesses may result in a finding that the program unduly burdens non-M/WBEs.¹⁵² However, "innocent" parties can be made to share some of the burden of the remedy for eradicating racial discrimination.¹⁵³ The burden of compliance need not be placed only upon those firms directly responsible for the discrimination. The proper focus is whether the burden on third parties is "too intrusive" or "unac-

150. Sherbrooke, 345 F.3d. at 973.

^{147.} Concrete Works IV, 321 F.3d at 971 (Denver introduced evidence of bias against each group; that is sufficient).

^{148.} *H. B. Rowe*, 615 F.3d at 233, 254 ("[T]he statute contemplates participation goals only for those groups shown to have suffered discrimination. As such, North Carolina's statute differs from measures that have failed narrow tailoring for overinclusiveness.").

^{149.} Sherbrooke, 345 F.3d at 973; see also Grutter, 539 U.S. at 341; Adarand VII, 228 F.3d at 1183-1184 (personal net worth limit is element of narrow tailoring); cf. Associated General Contractors of Connecticut v. City of New Haven, 791 F. Supp. 941, 948 (D. Conn. 1992), vacated on other grounds, 41 F.3d 62 (2nd Cir. 1992) (definition of "disadvantage" was vague and unrelated to goal).

^{151. 49} C.F.R. §26.87.

^{152.} See Engineering Contractors I, 943 F. Supp. at 1581-1582. (County chose not to change its procurement system).

^{153.} Concrete Works IV, 321 F.3d at 973; Wygant, 476 U.S. at 280-281; Adarand VII, 228 F.3 at 1183 ("While there appears to be no serious burden on prime contractors, who are obviously compensated for any additional burden occasioned by the employment of DBE subcontractors, at the margin, some non-DBE subcontractors such as Adarand will be deprived of business opportunities"); cf. Northern Contracting II, at *5 ("Plaintiff has presented little evidence that is [sic] has suffered anything more than minimal revenue losses due to the program.").

ceptable". As described by the court in upholding the Illinois Tollway's program for non-federally assisted contracts,

[t]he Court reiterates that setting goals as a percentage of total contract dollars does not demonstrate an undue burden on non-DBE subcontractors. The Tollway's method of goal setting is identical to that prescribed by the Federal Regulations, which this Court has already found to be supported by "strong policy reasons" [citation omitted].... Here, where the Tollway Defendants have provided persuasive evidence of discrimination in the Illinois road construction industry, the Court finds the Tollway Program's burden on non-DBE subcontractors to be permissible.¹⁵⁴

Burdens must be proven and cannot constitute mere speculation by a plaintiff.¹⁵⁵ "Implementation of the race-conscious contracting goals for which [the federal authorizing legislation] provides will inevitably result in bids submitted by non-DBE firms being rejected in favor of higher bids from DBEs. Although the result places a very real burden on non-DBE firms, this fact alone does not invalidate [the statute]. If it did, all affirmative action programs would be unconstitutional because of the burden upon non-minorities."¹⁵⁶

Narrow tailoring does permit certified firms acting as prime contractors to count their self-performance towards meeting contract goals, if the Study finds discriminatory barriers to prime contract opportunities and there is no requirement that a program be limited only to the subcontracting portions of contracts. The DBE program regulations provide this remedy for discrimination against DBEs seeking prime work,¹⁵⁷ and the regulations do not limit the application of the program to only subcontracts.¹⁵⁸ The trial court in upholding the Illinois DOT's DBE program explicitly recognized that barriers to subcontracting opportunities also affect the ability of DBEs to compete for prime work on a fair basis.

This requirement that goals be applied to the value of the entire contract, not merely the subcontracted portion(s), is not altered by the fact that prime contracts are, by law, awarded to the lowest bidder. While it is true that prime contracts are

^{154.} Midwest Fence I, 84 F. Supp. 3d at 739.

^{155.} *H.B. Rowe*, 615 F.3d at 254 (prime bidder had no need for additional employees to perform program compliance and need not subcontract work it can self-perform).

^{156.} Western States, 407 F.3d at 995.

^{157. 49} C.F.R. §26.53(g) ("In determining whether a DBE bidder/offeror for a prime contract has met the contractor goal, count the work the DBE has committed to perform with its own forces as well as the work that it has committed to be performed by DBE subcontractors and suppliers.").

^{158. 49} C.F.R. §26.45(a)(1).

awarded in a race- and gender-neutral manner, the Regulations nevertheless mandate application of goals based on the value of the entire contract. Strong policy reasons support this approach. Although laws mandating award of prime contracts to the lowest bidder remove concerns regarding direct discrimination at the level of prime contracts, the indirect effects of discrimination may linger. The ability of DBEs to compete successfully for prime contracts may be indirectly affected by discrimination in the subcontracting market, or in the bonding and financing markets. Such discrimination is particularly burdensome in the construction industry, a highly competitive industry with tight profit margins, considerable hazards, and strict bonding and insurance requirements.¹⁵⁹

6. Review the Duration of the Program

Race-conscious programs must have durational limits. A race-conscious remedy must "not last longer than the discriminatory effects it is designed to eliminate."¹⁶⁰ The unlimited duration and lack of review were factors in the court's holding that the City of Chicago's M/WBE construction program was no longer narrowly tailored; Chicago's program was based on 14-year-old information which, while it supported the program adopted in 1990, no longer was sufficient standing alone to justify the City's efforts in 2004.¹⁶¹ How old is too old is not definitively answered,¹⁶² but governments would be wise to analyze data at least once every five or six years.

In contrast, the USDOT DBE program's periodic review by Congress has been repeatedly held to provide adequate durational limits.^{163, 164} Similarly, "two facts [were] particularly compelling in establishing that [North Carolina's M/WBE program] was narrowly tailored: the statute's provisions (1) setting a specific expiration date and (2) requiring a new disparity study every five years."¹⁶⁵

^{159.} Northern Contracting II, 2005 U.S. Dist. LEXIS 19868 at 74.

^{160.} Adarand III, 515 U.S. at 238.

^{161.} BAGC v. Chicago, 298 F.Supp.2d at 739.

^{162.} See, e.g., Associated General Contractors of Ohio, Inc. v. Drabik, 50 F.Supp.2d 741, 747, 750 (S.D. Ohio 1999) ("Drabik I") ("A program of race-based benefits cannot be supported by evidence of discrimination which is now over twenty years old.... The state conceded that it had no additional evidence of discrimination against minority contractors, and admitted that during the nearly two decades the Act has been in effect, it has made no effort to determine whether there is a continuing need for a race-based remedy."); Brunet v. City of Columbus, 1 F.3d 390, 409 (6th Cir. 1993), cert. denied sub nom Brunet v. Tucker, 510 U.S. 1164 (1994) (fourteen-year-old evidence of discrimination "too remote to support a compelling governmental interest.").

^{163.} See Western States, 407 F.3d at 995.

^{164.} See Fixing America's Surface Transportation ("FAST") Act, Pub. L. No. 114-94 (2015.

^{165.} *H.B. Rowe*, 615 F.3d at 253.

E. H.B. Rowe Co., v. W. Lyndo Tippett, NCDOT¹⁶⁶

This is the most recent relevant opinion from the governing federal appellate court circuit for Charlotte as it considers whether to continue or revise its M/WBE program. Both the trial and appellate courts upheld the constitutionality of the State of North Carolina's M/WBE program for its state funded contracts, finding that there was a sufficient basis in evidence to employ race-conscious remedies for Blacks and Native Americans and that the statute¹⁶⁷ was narrowly tailored to that evidence.

Plaintiff, a non-minority prime contractor and low bidder on a North Carolina Department of Transportation ("NCDOT") road construction project, was denied a contract because it failed to demonstrate good faith efforts to meet the 10% MBE goal and the 5% WBE goal.¹⁶⁸ These goals were based on the approximate dollar value and the geographical location of the project, the number of eligible firms in the geographical area, and the anticipated value of the work items included in the contract. NCDOT specifically determined that the Plaintiff's submission did not demonstrate solicitation of enough minority subcontractors to allow for consideration of a fair number of quotes; did not adequately describe the subcontracting work available for the project; and failed to evince a strategy for meeting NCDOT's participation goals.

In upholding the statute, the Fourth Circuit Court of Appeals relied heavily on the State's 2004 Disparity Study, which included statistical and anecdotal evidence of past discrimination in the relevant industry and locality. Although there was anecdotal information about the continuing effects of discrimination against all the racial and ethnic groups and White women, the Study found statistical underutilization of only Black and Native American subcontractors.

The court concluded that this was a "strong basis in evidence" to conclude that the goals were necessary to remedy discrimination in North Carolina against Black and Native American subcontractors. A state may meet its burden by relying on a significant statistical disparity between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors.

The court next determined that the NCDOT program was narrowly tailored:

• NCDOT employed numerous significant race-neutral measures to enhance the development and competitiveness of small or otherwise disadvantaged businesses in North Carolina. These included a Small Business Enterprise

^{166. 615} F. 3d 233 (4th Cir. 2010).

^{167. §136-28.4} of the North Carolina General Statutes.

^{168.} Plaintiff's bid included 6.6% WBE participation and no MBE participation.

Program and waiving the institutional barriers of bonding and licensing requirements on certain contracts of less than \$500,000.

- The program set a specific expiration date and required that a new disparity study be performed every five years.
- Goals were related to the percentage of minority subcontractors and NCDOT took steps to ensure that goals accurately reflected the availability of MBEs on a project-by-project basis.
- The program was flexible because it provided for a waiver of project-specific goals when contractors make good faith efforts to meet these goals.

However, the court found insufficient evidence to justify including White female, Asian American and Hispanic subcontractors in the program under strict scrutiny.¹⁶⁹

Applying intermediate scrutiny to the program's inclusion of White women, the court found that the 2004 Study demonstrated overutilization of woman-owned subcontractors and that North Carolina failed to provide empirical or anecdotal evidence that woman-owned businesses were disadvantaged. Therefore, the Court invalidated the part of the statute aimed at woman-owned businesses.

^{169.} *Id.* at 245, 258 (noting that the study found that female subcontractors were overutilized during the study period and that underutilization of Hispanic Americans and Asian American subcontractors was not statistically significant).

III. CITY OF CHARLOTTE'S BUSINESS INCLUSION PROGRAM

A. Governing Statutes, Policy and Objectives

The City of Charlotte has a long history of implementing initiatives to encourage participation and remediate the effects of discrimination against minority-owned and woman-owned businesses in City contracts. In 1993 in response to the *Croson* decision, the City completed its first Disparity Study and adopted a program to remedy discrimination and encourage the growth of local businesses. Additional disparity studies were subsequently completed in 2003, 2011 and 2017 that resulted in updates to the program and governing policy. Findings of the 2017 study led to the adoption of the current Charlotte Business Inclusion ("CBI") Program.

A portion of the City's Program is authorized by North Carolina General Assembly S.B. 1336 and Section 8.88 of the Charlotte City Charter. These permit the City to establish a Small Business Enterprise ("SBE") Program to promote economic development and to enhance participation by small businesses in City contracts. The Minority and Woman Business Participation Program is governed by North Carolina General Statutes 143-128.2, 143-128.1, 143-128.4 and 143-13. State statutes also give the City broad authority to engage in economic development.¹⁷⁰

The CBI Program Policy, most recently amended in 2020, sets forth program coverage, requirements, policy and procedures. The Policy has seven parts:

Part A: Background and Administration, Appendix 1 to Part A: Definitions Part B: Construction and Commodities Bidding

- Part C: Services Procurement
- Part D.: Post Contract Award
- Part E: SBE and MWBE Certification
- Part F: Financial Partners
- Part G: Alternative Construction Agreements

A sunset provision for the race-conscious and gender-conscious provisions, including establishing M/WBE goals, is included in Section 8 of Part A of the Policy.

^{170.} G.S. 158-7.1 and G.S. 160A-456.

The Program is designed to promote diversity, inclusion and local business opportunities in the City's contracting and procurement process for businesses located in the Charlotte Combined Statistical Area.¹⁷¹ The overall program encompasses both race-neutral and race-conscience elements. In accordance with the City of Charlotte's Code of Ordinances, the City has adopted a race-neutral and genderneutral SBE program to enhance opportunities for all small businesses to participate in City contracts. To ensure utilization and participation of minorities and women on City contracts, the City has implemented a Minority-owned and Woman-owned Business Enterprise program.

B. CBI Program Administration

The Charlotte City Manager, the CBI Program Manager, City Department Directors and the City Attorney's Office are collectively responsible for administering the CBI Program. Each has the following roles and responsibilities:

The City Manager:

- Determines the organizational structure and appropriate staffing of the CBI Program Office.
- Establishes lines of authority and reporting for successful program implementation.
- Recommends funding for CBI Program staffing, operations, training and outreach.
- Assures the integration of the CBI Program components into the practices and processes of all City Departments.
- Revises the CBI Program as needed, from time to time, to facilitate administration and fulfill Program objectives.
- Evaluates all Department Directors efforts in integrating the CBI Program Policy into their practices and processes.

The CBI Program Manager:

- Administers the daily operations of the CBI Program and supervises the CBI Program staff.
- Develops necessary rules and guidelines to effectuate the purposes of the CBI Program.
- Advising the City Manager on CBI Program issues.

^{171.} The Charlotte Combined Statistical Area is the North Carolina counties of Anson, Cabarrus, Gaston, Iredell, Lancaster, Lincoln, Mecklenburg, Rowan, Stanly, Union, and the South Carolina counties of Chester, Lancaster and York.

- Consults with Department Directors and their staffs on CBI Program implementation.
- Serves as the ombudsman for SBEs, Minority-Owned Business Enterprises ("MBEs") and Woman-owned Business Enterprises ("WBEs") associated with the CBI Program.
- Revises the CBI Program as needed, from time to time, to facilitate administration and fulfill Program objectives.

The Department Directors:

- Ensure CBI Program compliance within their respective Departments.
- Develop and implement strategies to achieve the annual and project participation goals established by the CBI Program.
- Integrate the CBI Program components into their practices and processes.
- Monitor and report minority-owned and woman-owned business participation as required by North Carolina law.

The City Attorney's Office:

- Reviews the CBI Program, rules and guidelines to ensure their compliance with federal, state and local laws.
- Reviews recommendations to reject a bid for non-compliance with CBI Program requirements and provisions.
- Advises the City Council, City Manager, department directors, and the CBI Program Manager on legal issues related to the CBI Program and its implementation.

In 2017, the City Council established the CBI Advisory Committee. The CBI Advisory Committee functions as a review committee for the CBI program and assists in making recommendations to enhance M/W/SBE participation in City contracts. Committee members are appointed by the Mayor and City Council.

The CBI Office is managed by the CBI Program Manager and is staffed with 10 employees, inclusive of the Program Manager. The Program Manager reports directly to the Director of General Services. The Program Manager has the authority to adopt rules, guidelines and processes to implement the Program. This authority includes establishing, recommending, and monitoring M/W/SBE contracting goals and commitments; overseeing CBI policy and procedural compliance; conducting outreach, training and advocacy to encourage participation in contracting opportunities; and developing partnerships and initiatives to foster economic development of small businesses; tracking and reporting of CBI Program data and results to measure the success of the CBI Program; and issuing reports

that identify key achievements and challenges of the Program. Any amendments or modifications to the Program are within the purview of the City Manager.

C. CBI Program Eligibility Standards and Certification

The Program provides for two classes of firms for eligibility: 1. MBEs and WBEs and 2. SBEs.

1. MBE and WBE Eligibility and Registration

MBEs and WBEs must meet the following requirements to register for the CBI Program as an M/WBE.

- It must be certified with the State of North Carolina's Historically Underutilized ("HUB") Office.
- MBEs must be at least fifty-one percent (51%) owned by one or more persons who are, African American/Black¹⁷², Hispanic¹⁷³, Asian¹⁷⁴, or Native American/American Indian¹⁷⁵.
- WBEs must be at least fifty-one percent (51%) owned by one or more persons who are female.

2. SBE Eligibility and Certification

The City of Charlotte has defined its own criteria for SBE eligibility in the Program. To be eligible for SBE certification, a firm must meet the following criteria:

- Be a for-profit business enterprise.
- Be authorized to do business in the State of North Carolina.
- Hold a business or professional license required for the operation of each type of business in which it is seeking certification (defined by NIGP Codes).
- Demonstrate that eligible owners own at least 51% of the legal and equitable interest in the applicant firm.

^{172.} African American or Black: Having origins in any of the black racial groups of Africa.

^{173.} Hispanic: Of Spanish or Portuguese culture having origins in Mexico, South or Central America, or the Caribbean islands, regardless of race.

^{174.} Asian: Having origins in any of the original peoples of the Far East, Southeast Asia, Asia, Indian continent, or Pacific islands.

^{175.} Native American or American Indian: Having origins in any of the original Indian peoples of North America.

- Show that the firm's ownership is listed in his or her own name.
- Demonstrate that the interest in the firm was acquired with his or her own financial or equivalent resources.
- The owner has a personal net worth under \$750,000, excluding \$500,000 of equity in his or her primary residence.
- Combined with all Affiliates¹⁷⁶, have annual gross receipts less than 25% of the applicable size standards set by the U.S. Small Business Administration at 13 C.F.R. §121.201.
- Is not currently owned by an official, officer or employee of the City.
- Is either owned by a U.S. citizen, or permanent resident or an owner with a valid work visa from the U.S. government for the type of work that the applicant firm performs.

Both and M/WBE and SBE applicant must also demonstrate that it has a Significant Business Presence in the Charlotte CSA. The City applies the Totality of the Circumstances Test that takes into consideration a number of factors in making this determination, including, but not limited to, whether the business enterprise is headquartered in the Charlotte CSA, the number of full-time employees, the location of managerial or decision-making personnel, mail delivery locations, lease agreements and the percentage of income or revenue derived from work in the Charlotte CSA.

D. CBI Goal Setting Policies and Procedures

The CBI policy requires the program manager to establish a systematic methodology for setting SBE and MWBE goals. Factors to include in the methodology include contract size, availability of subcontracting opportunities, other data as applicable, and for M/WBE goals, whether they are warranted to remedy the effects of past discrimination.

The Program Manager can request the City Manager to appoint one or more Goals Committees that have members with the requisite expertise to advise the Program Manager in determining SBE, MBE and WBE contract goals. The Program Manager may also consult with the Charlotte Business Inclusion Advisory Committee regarding goals for various contracts.

^{176.} Two entities are "Affiliates" of one another when: (a) one controls or has the power to control the other, (b) a third party or group of party's controls or has the power to control both; or (c) there is a significant relationship between the two entities.

1. Aspirational Goal

According to the CBI Policy, Citywide aspirational goals are set for certain designated categories of prime contracts based on the availability of SBEs and MWBEs registered to do business with the City and on other data each fiscal year. The City has set an overall annual aspirational M/WBE goal of 20.9%, based on the 2017 Disparity Study. Goals are set for construction; architecture, engineering and surveying; professional services; other services; and goods and commodities.

The annual goal is applied only to construction contracts of \$500,000 and under and service and commodities contracts of \$100,000 and under (referred to as informal contracts). Goals for MBEs and WBEs are only set for those categories of firms that have experienced documented discrimination. Based on the 2017 disparity study, these groups are African American, Hispanic and Native America. For construction contracts under \$200,000, the user departments are required to use race neutral outreach measures to encourage participation of M/W/SBEs as prime contractors.

Exempt Contracts are excluded from goal setting. Exempt contracts are contracts that do not go through the competitive process; managed competition contracts, real estate leasing and acquisition contracts; financial partner agreements that provide DBE or M/WBE services; interlocal agreements; contracts for legal services; contracts where CBI Program requirements have been waived because there are no M/WBE or SBE subcontracting opportunities; and contracts with special exemptions.

2. Mandatory Subcontracting Requirements

SBE and/or MWBE subcontracting goals are established when subcontracting opportunities have been identified and when there are M/W/SBEs available to perform the work. MWBE subcontracting goals are limited to those categories of firms documented to have experienced discrimination in the Charlotte CSA. M/W/SBE subcontracting goals are set at the following contracts:

- Construction contracts of \$200,000 and greater.
- Architecture, Engineering and Surveying contracts of \$100,000 or more.

SBE goals are set on the following contracts:

- Commodities contracts of \$100,000 or greater on a case-by-case basis.
- Service Contracts of \$100,00 or more if the Program Manager or City Manager determines it in the best interest of the City.

At the discretion of departmental directors, CBI requirements, including M/W/ SBE subcontracting goals, can be applied to exempt and informal contracts. In these cases, the except contract will be deemed a "contract" for purposes of the Program. In addition, the CBI Program policy requires firms which enter into exempt contracts to notify the City of any subcontracting opportunities that might arise for which an SBE or M/WBE might participate.

The Charlotte City Council has the authority to establish mandatory subcontracting requirements for a particular contract. If the contractor is unable to meet the goal, then the contractor cannot complete the work through selfperformance and is required to subcontract the goal percentage.

Departments must obtain a Project Goal Waiver from the CBI Office for any projects without subcontracting opportunities.

For service contracts, the City may negotiate subcontracting goals after the proposals have been submitted. This applies only to categories of firms that have experienced discrimination in the Charlotte CSA and have been adversely impacted in their ability to obtain Service Contracts with the City, as documented by the City.

The Department CBI Liaison develops the weighted average subcontracting goals using a detailed estimation of the scopes of work to be performed, available SBEs and African American, Hispanic and Native American MBEs listed in the City's vendor database, and a review of historical data of actual results on past similar project scopes.

All proposed subcontracting goals are submitted to the CBI Office using the Project Goal Review Form for review and concurrence. The Department CBI Liaison is also required to submit accompanying historical data of two to three projects of similar size and scope from the last three years. The CBI Program Specialist can request additional information or recommend a change in the subcontracting goal. The CBI Office must agree with the final goal before the project is released for bid or posted.

E. Counting Participation Towards Contract Goals

To be counted towards the contract goal the bidder's proposed subcontractor must:

- Hold a valid certification with the City as of the proposal due date.
- Perform a Commercially Useful Function ("CUF").

Perform within the areas(s) for which it is certified or substantiate that the subcontractor has performed similar work in the past. Meet the goal category for the project, i.e., MBE goal is fulfilled by using firms documented to have experienced discrimination in the Charlotte CSA and for which the goal has been set on the project.

All bidders must be registered as a City vendor. Bidders have 24 hours after the City opens the bid or proposal ("Bid Opening") to receive credit towards meeting the contract's subcontracting goals.

Work that an M/W/SBE performs with its own workforces can be counted toward the goal on construction contracts under \$500,000 and on service contracts under \$200,000. Contractors with multiple certifications may be counted only once toward a particular goal. Goal credit will also not be given if it is determined that a listed subcontractor is an affiliate of the bidder or if a firm ceases to be certified between the time the City opens the bid and the contract is awarded. A bidder may replace a decertified subcontractor with a certified subcontractor, as long as the initial firm listed was not decertified based on false or fraudulent information.

Participation on construction and service contracts is counted as follows towards subcontracting goals:

- 100% of the value for services or work the M/W/SBE performs that serves a CUF.
- 100% for materials, supplies and equipment obtained from an M/WSBE manufacturer.
- 60% for all expenditures for materials, supplies and equipment obtained from an MWSBE dealer.
- Fees or commissions charged by an M/W/SBE hauler, broker or packager as long as the commission is not excessive and the M/W/SBE is performing a CUF.

F. Pre-Award Contract Procedures

1. Self-Performance

Bidders with the intent to self-perform 100% of the work on construction contracts with an M/W/SBE goal can submit an affidavit stating that the bidder does not customarily subcontract this type of project and has the capability to perform all elements of the work with its own forces. In these cases, the bidder is not required to submit evidence of Good Faith Efforts ("GFEs"). Should the City determine that the bidder is not licensed to perform or will not be performing all of the work on the contract, the City may reject the bid for noncompliance. Proposers can self-perform on a service contract if they can certify in their proposal that they are licensed, qualified and able to perform all aspects of the contract without subcontracting or have a valid business reason for self-performing all the work. Proposers intending to self-perform are encouraged to notify the CBI Program Manager at least fourteen days prior to the proposal due date to obtain clearance for self-performance.

Similar self-performance on commodity contracts is not permitted.

2. Utilization Plans, GFE Affidavits and Letters of Intent

A Utilization Plan, documenting the subcontractors and suppliers the bidder intends to use to meet the contract goal, and a GFE affidavit, documenting GFEs undertaken by the bidder if the contract goal was not fully met, are due with the bid. Failure to include a properly completed Plan or Affidavit is grounds for rejecting the bid.

Within three business days after receiving a request from the City, bidders must submit a separate Letter of Intent for each M/W/SBE listed in the Utilization Plan and Affidavit. The Letter of Intent must be executed by both the M/W/SBE and the bidder. Failure to submit the Letter of Intent by the deadline results in the bidder losing credit for the M/W/SBE's utilization.

If a bidder cannot meet an M/W/SBE subcontracting goal, it must comply with the City's good faith negotiation and GFE requirements within the time period specified by the City. Good faith negotiations must be documented by completing and submitting the Good Faith Negotiation Form stating the reasons the bidder rejected any interested M/W/SBEs. The City may also request additional documentation on a case-by-case basis.

Acceptable reasons for rejecting an interested M/W/SBE include:

- The M/W/SBE's bid was higher than the subcontractor the bidder decided to use.
- The M/W/SBE was not qualified for the scope of work.
- The subcontractor that the bidder decided to use was materially more qualified and using the M/W/SBE would have impacted the bid.
- The M/W/SBE's bid had a material deficiency. For example, it contained inaccurate information or would have caused the bid to be submitted late.

GFEs must be documented for each subcontracting goal that is not fully met. Failure to demonstrate acceptable GFEs are grounds for rejection of the bid. The City has established a point system to determine acceptable GFEs. Bidders must earn a minimum of 50 out of 145 GFE points that are calculated separately for each unmet subcontracting goal. All GFEs must be completed prior to bid opening, but supporting documentation is due within the time frame specified by the City or, absent a specified time, within three business days after a request from the City. Past performance in meeting goals and performance of other bidders in meeting the goals on a project are also taken into consideration when awarding GFE points.

The Program Manager is entitled to waive the GFEs and Good Faith Negotiation requirements when the lowest bidder is non-compliant with the requirements but has proposed a subcontracting plan utilizing M/W/SBEs to a greater extent than the next lowest bidder that complied with the GFEs and negotiation requirements. To determine whether to grant the waiver, the Program Manager must take into consideration the cost to the City, the differences between the two utilization plans, past instances of non-compliance, the level of GFEs and any other relevant factors. Waivers of minor GFEs and negotiation non-compliance are also at the Program Manager's discretion.

Contractors can enter into quick pay agreements with subcontractors in the initial contract bid to qualify for GFE points. Under a quick pay agreement, the prime commits to paying participating MWSBEs within twenty days after the contractor confirms that the MWSBE has properly performed the subcontracted work. The contractor cannot rescind the quick pay agreement once it is accepted as part of the contract terms.

G. Post Contract Award Procedures

1. Contract Monitoring Procedures

The CBI Office is responsible for reviewing all contracts, including whether the committed subcontracting goals are being met, the contractor has improperly terminated, replaced or reduced the work of an M/W/SBE, the contractor is complying with contract amendments, renewals or additions to scope and whether M/W/SBEs are performing a CUF.

In 2019, the City installed the B2Gnow InclusionCLT contract compliance and certification system. This system streamlines and automates the City's Program data gathering, tracking, reporting and vendor management. The system has enabled close monitoring, tracking and reporting of compliance with M/ W/SBE and DBE commitments. Prime vendors are required to report payments made to all subcontractors and suppliers. Subcontractors are then required to review and confirm the accuracy of the payment amount. Failure to provide payment reports within the specified time period results in sanctions and withholding payment. The City may request documents, information and materials for determining wither the contractor is in compliance with the CBI Program. All requests must be fulfilled within three business days unless a longer period is agreed to in writing. Failure to comply can result in withholding payment imposing liquidated damages.

2. Meeting Contract Goals

The CBI policy imposes on all contractors an affirmative, ongoing obligation to meet or exceed the committed contract goals over the life of the contract. Contractors can be deemed to be in violation and in breach of contract if the City determines that the contractor will not meet the subcontracting goal and the reasons for not meeting goal are within the contractor's control. Exceptions include the following:

- The City reduced the scope of the contract, thereby eliminating or reducing work for the subcontractor(s).
- An M/W/SBE voluntarily withdrew from the contract for reasons beyond the contractor's control and the contractor made GFEs to replace the subcontractor.
- Termination or reduction in the work of an M/W/SBE was consistent with the terms of the Program.

In addition, any contractor that does not ensure that an M/W/SBE subcontractor performs a CUF on the project can be deemed in violation or in breach of contract and will not receive goal credit for the amount of M/W/SBE participation that is not a CUF.

3. Change in Certification Status and Termination of MWSBEs

A contractor may lose the ability to obtain goal credit towards the subcontracting goal when there is a change in an MWSBE's certification status after bid submission if the MWSBE's certification is terminated because it is determined to be an affiliate of the contractor or because of false or fraudulent claims about which the contractor was aware.

Dollars paid to an M/W/SBE whose certification expires or a SBE whose business size exceeds eligibility under the City's CBI Policy will be counted towards the contract goal.

All contractors must provide the City department and Program Manager with written notice outlining the reasons for termination at least five business days prior to replacing or terminating an M/W/SBE on a contract. In addition, the contractor must provide written notice stating the reasons for termination to

the M/W/SBE prior to termination. Contractors can terminate, replace or reduce the work of an M/W/SBE that has been counted toward the goal if the M/W/SBE does not enter into contract consistent with the letter of intent; the M/W/SBE's certification is terminated; the M/W/SBE materially breaches its contract with the contractor; the City reduces or eliminates the contract scope the MWSBE was to perform; or the M/W/SBE withdraws from the contract for reason beyond the contractor's control. The contractor shall provide written notice to the SBE or M/WBE stating the reasons for the termination. Unless circumstances dictate otherwise, the contractor shall provide notice before termination.

A contractor must replace an M/WSBE who withdraws or is terminated using modified GFEs. These modified GFEs also apply to new subcontracting opportunities or if the City sets a supplemental M/W/SBE goal. Modified GFEs include:

- Soliciting at least three M/W/SBEs (or fewer if the City agrees in writing).
- Complying with GFE requirements for contacting M/W/SBEs.
- Providing a Letter of Intent for each added subcontractor.
- Meeting at least two of the point-earning GFE requirements (excluding attendance at a pre-bid meeting).

4. Payments to MWSBEs

The North Carolina General Statutes requires prime contractors to pay subcontractors for completed work within seven days of receipt of the final or periodic payment received by the prime contractor. If this commitment is not met, the prime contractor is required to pay the subcontractor interest of one percent per month on the unpaid balance starting on the eighth day. This requirement applies to all M/W/SBE subcontracts unless the prime contractor and subcontractor have entered into a quick pay agreement.

H. CBI Program Violations, Investigations and Sanctions

A violation of the CBI Program by a contractor can constitute a material breach of contract. The CBI Policy provides for the following remedies:

- Termination or suspension of the contract for default.
- Withholding all payments due on the contract until the violation has been resolved and a mutually agreeable resolution has been reached.

Assessing liquidated damages that include:

- For missed goal attainment, \$200,000 or the dollar difference between the MWSBE goal commitment and what was missed.
- For use of a conduit¹⁷⁷, \$100,00 per occurrence or the dollar amount of what would be paid.
- For wrongful termination or replacement of an MWSBE, \$50,000 per incident or the dollar amount of remaining work.
- For failure to comply with CBI requirements following a termination, withdrawal or addition of an MWSBE, \$50,000 per incident or the dollar amount of remaining or new work.
- For making false statements, the lesser of \$50,000 per incident or the dollar difference between what the contractor represented and the true amount if the misrepresentation pertains to payment.
- For failure to respond to a request for information or documentation, \$40 per day for each day that the information and documentation are overdue.
- For seeking credit for the use of an affiliate, \$75,000 per incident or the dollar amount the contractor counted toward the contract goal.
- For not meeting the promised quick pay commitment, the lesser of \$50,000 or 10% of the dollar amount the contractor promised to pay.

When the CBI Office determines that a contractor has violated the Program, the Department Director is responsible for making a recommendation to the Program manager regarding appropriate City action. The Program Manager makes the final decision regarding the appropriate remedies and coordinates with the Department Director responsible for the contract.

I. Vendor Outreach

The City and the CBI Program use multiple approaches to encourage small business participation in procurement opportunities. Initiatives include programs and resources that support development of small businesses, minority-owned firms, and woman-owned firms.

The City regularly holding pre-bid conferences to provide information about the bidding process to small businesses. The City also sponsors several supportive services programs:

^{177. &}quot;Conduit" is defined in the Charlotte Business Inclusion Program Policy as an "SBE or MWBE that knowingly agrees to pass the scope of work for which it is listed for participation and is scheduled to perform or supply on the contract, to a non-SBE or non-MWBE firm. In this type of relationship, the SBE or MWBE has not performed a Commercially Useful Function and therefore the SBE's or MWBE's participation does not count toward the SBE Goal."

- Advance Your Business Tuition Assistance Program provides certified firms with up to \$300 of support towards classes taken at the Small Business Center at Central Piedmont Community College.
- Professional Association Sponsorship provides certified businesses \$100 toward the first-year membership
- in a local association or chamber of commerce. The sponsorship is provided to facilitate networking and promote joint ventures.

The City and the CBI Program also partner with other government agencies, nonprofit organizations, academic institutions and chambers of commerce to provide assistance to increase small business capacity and advance business skills. These programs include,

- The Charlotte Community Capital Fund. The Fund provides financial assistance by guaranteeing up to 85% of the loan amount. The program allows lenders to underwrite and originate loans requiring limited collateral and to provide small businesses with favorable rates and terms and flexible underwriting.
- StreetWise 'MBA'[™] curriculum. AMP Up! provides business owners practical business education, a supportive business network, and access to experts and resources in finance, contracting opportunities, human resources, and marketing. The program concludes with the business owner students presenting their three-year strategic growth plan to a panel of local business experts.
- Inclusive Procurement Training Program at Johnson C. Smith University. This statewide learning program provides classes in person and online on entrepreneurial education and training opportunities and helps small businesses gain access to capital and contract opportunities.
- Central Piedmont Community College Classes. These classes include "how to write a construction bid".

The CBI Program partners with local minority advocacy groups such as the Metrolina Minority Contractors Association, Hispanic Contractors Association of the Carolinas, the Latin American Chamber of Commerce and the Charlotte chapter of the National Association of Women Business Owners to perform outreach and provide technical support to small and minority-owned and woman-owned businesses.

The CBI Program sends regular outreach email alerts to vendors about upcoming solicitations, outreach events and other Program services. From 2016 through 2020, the City sponsored or participated in over 33 outreach events. These ranged from Town Halls sponsored by City Council members to the NBA All Star MWSBE Meet & Greet to the Black Enterprise Entrepreneur Summit.

The B2Gnow InclusionCLT provides online access to bidding opportunities, current projects and upcoming events and training sessions. In addition, the City's website includes a portal for vendor registration and access to contracting opportunities across all City departments and final bid results. Doing Business With The City, a resource guide, is also available on the website.

J. CBI Staff Training

CBI Program staff attend the annual B2Gnow User Training Conference and the American Contract Compliance Association's annual National Training Institute.

K. Experiences with the CBI Program

To explore the impacts of Charlotte Business Inclusion Program, we interviewed 93 individuals about their experiences and solicited their suggestions for changes. We also collected written comments from 490 businesses about their experiences with the CBI Program through an electronic survey. Comments are indented and have been edited for readability.

1. Experiences with CBI Program's Policies and Procedures: Business Owner Interviews

Most M/WBEs reported the CBI Program has benefited their firm. Contract goals were viewed as necessary to ensure equal access to City contracting opportunities.

We need to keep [the Program].

We've done a lot of work for the City and we've had good experience with the City.

We've made lots of progress and there's lots there, but it's not fully addressed. And especially in a city like Charlotte, while we have a lot of minority leaders who are making decisions, there still has to be a program in place to keep goals on the contracts. Being listed on the M/WBE and SBE list has been very helpful. I believe I have been contacted by prime consultants for sub consulting opportunities as a result of my certification. Also, I have received great information from the City of business support services available to MWBE/SBE firms.

Most prime vendors stated they have been able to meet M/W/SBE goals on City contracts.

We, fortunately, have always been able to meet our goals.

We are not really encountering any problems with using our, or meeting the goals for the MBE, SBEs, and we have really good rapport with all of our people. Us as a prime, we're bidding the smaller projects that don't send us way out there, and we're just not having any problems with any of our people, and we don't have a problem with the City of Charlotte and needing them to do anything either.

We have found the City to be very helpful and very supportive. Charlotte Water has been very responsive when I've had questions or concerns or challenges. But some of the things we're doing is, we are using an outreach coordinator on most of our projects, because sometimes there's better connections than what we may have, and it opens the doors to creating opportunities, and they have a lot of good feedback about how to help our subcontractors utilize minority subcontractors. So, brings us into the second and third tier.

Some scopes were more difficult than others to obtain qualified M/WBE subcontractors.

The more technical trades are short in all areas.

The water wastewater market is sometimes difficult for smaller contractors because it's a little bit intimidating.

It's a little tough to find the people that have the higher skillset that you're looking for.

It's really hard to find other small firms that'll work [in our specialized industry]. For example, we have two subs on our current contract and we'll give them a call and say, "Hey, can you help us with [scope]?" They say, "No, we're too busy. We can't help you until January," those sorts of things. So, we've had a pretty hard time trying to meet the goal even when we try really hard to.

You're lucky to find an electrical contractor to even submit a bid or to provide a quote to a general contractor. There's just a lot of work in this area. And that has been very difficult for general contractors to even find any sort of subs, let alone of minority subs or good subs.

Engineering firms seemed to face more challenges finding qualified firms.

It's hard to find designers and engineers on the list.

It is difficult on the professional side to find those people that can do enough of the work to meet that 10% to 20% goal.

This is a resource limited market. And if there is a participation goal of 10% or sometimes higher, there are not enough firms that can take on that work, or you're using the same firms all over again, whether it's for surveying, electrical, geotechnical, et cetera. And then they're over stressed as well. It's one of those things where it's almost like we need more small business enterprises from an engineering perspective.... There's just not enough firms out there, small businesses, minority businesses, women owned businesses to do the work.

We're all going to basically the same five surveyors and the same five geotechnical firms and the same two or three electrical engineering firms that have experienced doing the type of heavy industrial electrical design work that we are exposed to. So, you get that burnout effect.

Task order contracts, which by design do not provide definite scopes at the time of contract award, were especially problematic.

We have to commit to a goal ahead of receiving the professional services on call. So, we have to meet an eight percent goal, not knowing what task order. So, we've added two firms to our team for the on call. And we get selected not knowing what tasks we're going to be given. Then we get a task and we have... We have a \$17,000 task right now through the on call. We want to try to get somebody. We reached out to both of our firms. One hasn't called us back and one says, we can't work on it until January and the city wants it done by the end of October.

We give a shot on every task order because we want to meet it at the end and we're behind. We're already behind. So, every task order we're trying to get participation so that we can get ahead. And on this particular one, we had some tasks that we thought would be better suited, so we amped up to 20%. But then we couldn't get participation. So now we're further behind. And then we'll do the same thing on the next task order. We just want to meet the city's expectation. We want to be a good partner. We want to meet what we said we were going to do when we signed the contract. It is very hard... especially in a growing market. If we were in a recessionary market, you could go out and find somebody to help you with these tasks. We wouldn't give somebody a call and they say, we can't help you until January. It's just because there's so much construction, so much design going on right now that it's really difficult to meet it in the current economic climate.

There's no guarantee you're going to get another task. You may only get one task with that particular on call [contract] and that's the problem we're having with these on calls is not knowing exactly what the scope of work is going to be. Who do you add to your team to help supplement what you need to meet the goal? I've discovered that I might as well just throw everything including the kitchen sink from public involvement, all the way to geotech, survey, the whole works. And I have noticed on some previous advertisements that they'll only ask for a minority or a small business goal, they totally exclude the women owned business goal. So, that cuts out a whole list of available firms that you might want to add to meet your goal.

We would find it much easier to meet our goal if we could more easily change our subs after being under contract, especially on an on call contract.

Some bidders complained that certified firms were sometimes listed in more industry codes than they were qualified to perform.

The [certification] list can also be fine-tuned because some people get in and they qualify and they educate them to select everything, even if you're not doing it yet. And if you may [search] and come to find out, they don't do half the services that they've selected.

The requirement that the certified firm be based in the Charlotte Statistical Area increased the difficulty of meeting goals.

It's very difficult to get participation when you can only use firms within a certain radius of the City.

Some large contractors reported that using a more flexible procurement method, such as design build contracts, would help to increase opportunities for M/WBEs.

We can help, as contractors, we can help with the bonding, we can help with the training, we can help with the education, we can act as mentors. But the challenge becomes there are so many very large projects now, and those are the projects we really need a qualified contractor. So, how can the City help us there? And my comment is that I think the City can have a huge impact on our ability to grow these businesses, if they're willing to look at alternative methods for procuring their work. And Charlotte has been willing to do that You cannot be restrictive or prescriptive on how design-build is being done, because that is actually our greatest opportunity to grow and develop this market.... [Using a design-build approach,] I can now reach out to the local community and have a package designed just for minority women, small businesses, and tell them, "You're going to bid on this. So, this is going to be a competitive process. But we're going to break this into something that fits your strengths, so that you can be successful." And I can do that because I'm not bidding against other contractors.... So [design-build] gives us the ability to really shape, build, and mentor a smaller firm. And that's really critical for a bid world [where] it becomes very difficult as we try to maintain ethical standards, as we try to maintain the competitive nature. We have to be low bidder. That's part of the game. So, there's less time to negotiate value-engineer, create these opportunities when we're fighting this competitive hard bid market.

Most of the time we're able to do that, we're able to meet that goal. I think it's on the really, really big, big projects where it's difficult. And what we're seeing now with the alternative delivery approach, that at least Charlotte Water's taking with design-build, it's tough to meet that 10% goal on a \$50M project or a \$40M project.

When you get into the alternate delivery work it does become more challenging when they start to set goals in the initial selection phase that you're trying to put all these people on your team partnered up with a contractor to win but you really don't know what the heck they're going to do and how you can promise that you're going to meet a goal when you haven't really designed it, or really know how they're going to do it. You're putting your best foot forward, but you're taking a bit of a flyer that you can actually make it. And when we put forward, hey, we're given our word, we're going to try to make this goal. And then you come back and you're way short. You feel like you've let Charlotte Water down and the City of Charlotte down and you can't meet it because things changed.

Several participants had been able to successfully submit documentation of their GFEs to meet the contract goals.

We've had to submit good faith effort We didn't meet overall our goal, but we were trying to increase goals, and we were always trying to look. But there were certain times that we just could not find anybody in certain trades, just like they were discussing before. And so, we showed that we did solicitations, we made calls, we did advertisements, we basically did everything reasonable and responsible. And [the City] understood. We can show the documentation showing that we had done everything. And we were looking for participation and an honest effort, and I think that's what they want to see.

The City is easy to work with when you cannot meet the good faith effort. They have been a partner in trying to ensure that they put opportunities in front of you, as far as finding contractors and subcontractors. And if you aren't able to reach that goal and you've put forth the good faith effort, we have been awarded the contract. There hasn't been a time we haven't been awarded, but we do follow the process that they've put in front of us.

They have a very good department, they're open to talking and things like that. And we've got to provide documentation that the subcontractor won't work, we can't just say they don't work for us, so there's got to be a good paper trail there.

However, when there was a change in scope, even at the City's behest, the prime contractor was still required to meet the goal.

We have had to substitute, but we were not given an option as to, even though in one case, it was because of a change in the scope initiated by the City. They still told us, well, now we lose our contractor, a minority contractor, we still had to find someplace else to replace the minority contractor. Didn't have to be the same scope, but we had to make up those dollars. They were not giving us any opportunity to reduce that number. So, we did have to do that. And there was one situation though where we had a minority contractor who did some work, and then came back to us and said, "This is not what I thought it was, and it's more work than I can manage. And when I'm hiring temporary labor, and I'm losing money, so I suggest that this last piece, I withdraw for your benefit, and for my own until I can get this pool together." So, we said, "Okay, that's fine." But we did still have to come up with a way of making up for the amount of work that he did not complete. I've never seen them let us lower our goals or our participation.... It was very clear to us. I don't care if you're losing this participation, I don't care if it's because of my

decision as the City, you still need to make that up. And we were able to, so it was not a problem. But it is a requirement.

Many owners stated that small firms and M/WBEs would benefit from more technical assistance and supportive services.

We need a good training program for the minority to help the minority be successful.

I deal with so many people who are good at their trade. They're really good at their trade, but they are not good at business.

Most small businesses need to know how to run a business and most of them don't, they start with some skill or ability and they don't necessarily have everything in order. So, anything to help them shore up the infrastructure, the business is probably super helpful.

Some more experienced firm representatives suggested more offerings for mature firms.

The City offers a lot, an abundance of programming for new businesses or people who want to get into business.... I don't know that there's as much information out there for existing companies that may be in need of assistance.

There is a huge need for the City to expand some of our scope perspective within our minority businesses.

A lot of people understand how to get prequalified, that's not the problem. I would like to see training [on] safety processes and protocols.

A mentor-protégé program was another approach to increasing the capabilities of M/WBEs recommended by both M/WBEs and large non-M/WBEs.

I do like mentor-protégés. I think it's a good relationship if we got the right firm for the right project. We have done it on multiple occasions [as a large prime contractor], and it's worked out well.

We actually gained a lot out of our mentor-protégé company, because the company that mentored us, their capabilities were much larger than ours. But the processes, the documentation, being exposed to some things that we didn't know about really helped make us more efficient, and we all know the more efficient we are the more things we could take on. But it was a good experience. The only negative that I'll take away from it, from a decision-making capacity, the people that you interface with weren't always the people that could make the decision, ultimately.

2. Experiences with the CBI Program's Policies and Procedures: Survey Responses

Minority and women respondents strongly supported the program. Many stated the program was essential to obtaining business.

Being listed on the M/WBE and SBE list has been very helpful. I believe I have been contacted by prime consultants for sub consulting opportunities as a result of my certification. Also, I have received great information from the City of business support services available to MWBE/SBE firms.

[The program is a] pipeline for new opportunities.

The CBI program is what helps us stay in business.

Helped business to be part of large project.

It has helped us receive more work as a lot of general contractors are looking for certified businesses.

It has positioned my company for success with contracts.

The program has allowed us to partner with firms that otherwise would never have contracted with us due to their size and capability to handle the work on their own.

Yes, [by] providing opportunities we can fulfill.

MBE/WBE project goals have incentivized prime contractors to use firm as subcontractor.

The program/project goals have provided opportunities for prime vendors to engaged us in participating on the project.

Opened doors to government contracting opportunity notifications and solicitation. I am working on my first contract with a prime contractor for a city project.

It helped as far as receiving some bid opportunities.

We have grown and have steady work.

It has enabled our company to participate in projects that would have gone to other non-DBE companies.

Alot [sic] of contractors want work or give my company a chance I believe because I'm black and a female.

I suspect women-owned businesses, especially with government contracts, are hired less frequently. If there was true equity, we wouldn't need these designations.

We had the opportunity to work with the airport and develop a really strong relationship there and enjoy working with that team. We had support understanding how the city worked and how to navigate the fairly complex billing and accountability system that is not in place in other municipalities. The airport's own staff was amazing and helpful.

The programs have helped me in keeping my business afloat during the pandemic.

Many M/WBE respondents praised the program for providing more exposure and access to both prime contract and subcontracting opportunities.

It puts your company where other companies can know about you.

Provided us ability to work with Charlotte Fire and Charlotte Water based on MBE status.

A resource for Prime Contractors looking for MWBE.

Good notification of available professional services opportunities.

Given good information on the process.

We are on the list and we get invited to the meetings.

I do think that the City's MBE and SBE database has helped my business get the attention of some primes.

[My business] gets notifications for potential bid opportunities.

It gets you a second look.

I have not been awarded any work as of yet, but I am getting regular opportunities to bid.

The [program certifications] designations have helped with credibility.

[We receive] notifications of upcoming bids and prime contractors reach out to us in order to fulfil MBE requirements.

[The program provides me] with more knowledge about doing business with the city.

They reached out to me directly for an opportunity I was a perfect fit for and because of that I applied and got the opportunity.

Networking and getting primes to give opportunities for new firms [has helped our business].

[The program has helped provide] opportunities to get in front of people seeking consulting services.

A non-M/WBE respondent agreed that access to information was important to success of the program.

The key to the most successful programs I've worked in over the years is a combination of easy access to resources, easy access to information (where and when you need it), and a sense of community. A place where those experiencing similar challenges can gather, share ideas, and solve common problems. Any program the City considers should include as many of these elements as possible.

Several respondents complimented the program and their experiences working with the City.

They've provided the type of leadership necessary for a business like mine.

Appreciate working with the city and the [Right of Way] program, thanks.

I would just like to thank the program.

I think you all do a great job. Just keep on being consistent and presenting great information, webinars and follow up surveys such as this.

[Program staff] very promptly answers questions and offers assistance.

Please continue sharing out non-construction contract opportunities directly with the MWSBE community. Thank you!

One M/WBE respondent thought the City could do more to assist MBEs.

1.Stop giving MBE firms only opportunities on low-wage/low contract work. If that's the end of your commitment, just be

honest and say so instead of patronizing MBE firms. 2. Have real, meaningful goals, not just the obligatory 3-5% set for the sake of appearance. 3. Do something about the vast majority of government employees who think we are welfare cases and don't want to do anything because they are so anti-business and simply think MBE programs are hand-outs. Until you change the mindset of government employees, nothing is going to change.

Several minority and woman respondents suggested that the City should publicize the CBI Program to qualified firms to encourage participation.

Make the process easy, available, and market it to those qualified.

Make more accessible. I was not aware of the availability of these programs.

Maybe disseminate information better. Not aware of programs for minority business owners.

Reach out to these business owners, ADVERTISE the ability to be certified, and the benefits of these programs. Make the application process simple and accessible.

Let small businesses know about your programs and opportunities to bid on contracts. I provide a service every govt agency could benefit from.

While most respondents supported the program, many also found the certification process challenging to navigate, paperwork intensive and cumbersome.

I am NC-HUB certified. Becoming Charlotte certified is a cumbersome additional step.

An easier way to get certified [would be helpful].

I was processing my application, and I was forced to start over as it was removed from the system.

Please make the [certification] process clear and simple. We are business owners and do not have time to decipher government lingo and multiple applications.

Having trouble completing all the necessary [certification] paperwork.

In the process of the application, but is always returned due to needing more info.

[Certification] process is ridiculously difficult.

Certification was confusing. it appeared that we were ruled out because the partners had investment income.

Charlotte city needs to make process simple, easy and encouraging with navigators to help minorities complete the process, this will be best way to use tax dollars and offer equal access to minorities contractors those who really are doing work for prime contractors who pay less and make more like brokers. Start a person-to-person navigator service where a staff is assigned contractor interested to get certification and work on job as direct contractor.

We have tried; however, the process has been tedious (two attempts). Once it gets to the point of submitting so much information, I usually run out of time.

The process is complicated and too long.

Too much hassle to get, and stay, certified. Plus, some jurisdictions require certification with different entities, making our job even harder!

One respondent, however, thought the certification process had improved.

They reached out to me to get certified which I really appreciated. They also made the certification process MUCH faster/easier than it was in the past, which was the barrier to me getting certified earlier.

Several respondents reported that the information required for certification is too invasive.

Did not want to submit all the confidential financial info - don't trust the confidentiality.

My company is a SC registered company. I was told that I would have to get SC certification before NC would accept my application. I totally disagree with the amount of personal information that is required to become certified.

Some Black women respondents noted that WBE certification criteria should be expanded to include minority women.

Due to being a Black female I am not able to obtain the WBE certification. It would be nice if the WBE certification was available to all women owned businesses I have lost three

opportunities due to my company not having the WBE certification.

Being able to have the WBE certification [would be helpful]. I have had a couple of companies reach out to me to bid on projects with them but I had to have WBE certification.

I think it would be beneficial for the City to reconsider its criteria for WBE. I am both a person of color and a woman who faces two times the discrimination. Both certifications should apply and was surprising to me when I learned that WBE was reserved for non-minority women exclusively.

3. Access to City Contracting Opportunities

Some M/WBE firms suggested that local preference requirements should be expanded to include additional North Carolina counties.

Expand the local definition to include more counties to the west of Charlotte.

Please do not limit opportunities for minority firms within a 10county radius of Charlotte. If a firm is prequalified with NCDOT and NCDOA. There [sic] participation should count towards all MWBE project goals!

Some respondents stated that the City and prime contractors repeatedly uses the same firms.

Stop giving the jobs to same companies over and over, try to help other small companies to learn how to do business with you, support financially and educate leads of each company, don't focus on the easy, which is continue to give the jobs to the same companies day after day.

Open your opportunities to new vendors every so often and help local businesses learn how to do business better with the City.

Have administrators check the lists for firms not used.

More consideration from municipalities like Charlotte. Primes tend to stick with "familiar" subcontractors.

Give More Minority-Owned Businesses a chance...equal to our representation in the population...and NOT just the companies with an established reputation.

A few respondents thought the City could do more to open up contracting opportunities for small firms.

Set aside contracts for MBE/WBE and SBE firms so these firms compete with like size firms.

Score MBE/WBE higher - typically we are smaller companies and can't price ourselves like the large companies so all lowest price contracts are always lost.

Several minority and woman respondents suggested that the City offer smaller projects or "unbundle" contracts.

Should break up some of the larger jobs so small business can afford to bid the job. Some Small businesses can't bid 3-million-dollar contracts.

Easier bidding process or opportunities under the bidding threshold.

More or smaller, sub-contract opportunities.

Some M/WBE respondents requested more opportunities to perform as prime contractors.

With more direct opportunities directly and no middle company in between.

More targeted opportunities geared for certified firms, whereby they can develop their capabilities as a prime.

I think that having solicitations where ONLY an MBE and/or SBE could be the prime contractor would help a lot. That would help level the playing field.

It will be highly beneficial to certified firms if there are more opportunities where they can showcase their prime capabilities. Most time the project scope is package so large that these certified firms are needing to partner as a sub to a prime. And in most case, at least in our experience and through some discussions with others, the work is so narrowly defined by the Prime that these subs do not have an opportunity to showcase or develop their holistic capabilities, i.e., technically or project management wise. This hurts the certified firm and the City, because a pipeline of firms are not effectively being developed and in the long run means less competitive bids for future City projects. One M/WBE respondent suggested the program should be expanded to include goals on contracts on non-construction.

MBE/WBE goals seem to be set in construction projects, but not in other types of projects. As I am not in construction, the goals do not help me grow.

Many M/WBEs requested more technical support and training to respond to contract solicitations and RFPs.

Have training for the new certified businesses and how to bid, submit RFPs and best practices to WIN the contracts. It is a LOT of information and overwhelming.

More efficiencies with RFP process and understanding of how to respond to RFP. Also, understanding more about why we did not receive the business.

Provide some type of RFP class.

Training on who to contact and how to navigate they system.

More help with the RFP process and making it more efficient for small/minority/woman businesses.

Learning how to bid on jobs.

More initiatives for guidance of small businesses, I would love to learn the process and information in depth to gain access and also teach other small business owners how to do the same.

I would love to know HOW to respond to an RFP/RFQ.

Assistance with bidding and how to bid.

I need to have the ability to communicate with the city and to be taught how to bid on city contracts.

Several M/WBE respondents viewed greater access to City Staff as a way to assist them.

I focus on for profit business and government work where I have established relationships. If there are more forums with decision makers to meet. That would be valuable. Doing advisory/consulting in the area of strategy and organizational change, I need to connect with City Managers and other senior leaders. They are not the typical attendees at events.

Access to city departments.

Attending the network events are fine but they are not enough if nothing comes out of them. So, most of the time, I feel they are a waste of time. Speaking directly to the decision makers would help.

Communication with the City decision makers so we can showcase our products and expertise.

Guidance to [from] the decision makers.

Have not been able to access purchasing managers.

4. CBI Program Compliance

Several M/WBE respondents suggested more oversight is required to ensure prime contractors comply with program requirements.

Any certified program is only as good as the compliance officers uphold the prime contractors on the rules. Once the primes realize they do not have to play by the rules, then the program becomes worthless. If you want a strong program, then make sure that there is accountability from the top to the bottom of the actions by the compliance officers throughout the City of Charlotte.

Stop pointing at the door and actually open it for us. You tell us of a job, you introduce us to the job holder but are you making sure we are getting the work. Are you actually requiring that an MBE business be used for a project? Are you making the selection on that MBE? Are you monitoring, counseling and helping with funding for this MBE?

There needs to be better performance goals established and employees in these programs need to be paid based on how many and how often MBE/WBE/SBEs are on contracts. Unfortunately, they are paid whether they help us or not; whether they answer their phone and respond to emails or not; whether they meet contracting goals or not. Some need to find new jobs and allow others who really want to see us succeed.

Push/require groups to utilize MBEs.

Need more support and/or enforcement from/to the bigger firms to give us the chance to participate.

The main problem in any program is holding the City managers and their subordinates accountable. The Prime contractors will NOT NORMALLY do anything that does not make them comfortable. Same ole, same ole, is normal.

Having Fortune 1000 companies live up to their goals and give capable minority companies a real chance.

Track the payment that is being made to small contractors, especially Hispanic subcontractors, 70% of the time, we don't even get paid or we get cheated with the payment, and contractors above us are getting away with it.

Several M/WBE contractors noted the effectiveness of verifying contractor payments to ensure prime contractor compliance.

As a lower tier supplier, accountability on the Prime to confirm payment totals and dates has been a very big help.

The B2Now Software has been a great platform to begin making sure that subs are paid the correct amount promptly.

5. CBI Program Outreach

Many M/WBE respondents were unaware of bidding opportunities and requested more outreach.

Knowing what types of contracts are available [would be helpful]. Would love to receive notifications.

Information when new projects in my field come about.

[I would like to] get on the contracting services lists.

I have no idea how to get on a list as a SPSF with the City of Charlotte but I'd like to be considered for sub consultant work on municipal planning projects.

More information and follow-up.

More opportunities that are well communicated.

Learning about opportunities to bid on contracts with the city.

Better communication.

Communication to all MBE/WBE and SBE [of potential] business opportunities.

Do an outreach to small businesses that may feel intimidated by the process of getting registered as minority or women owned. Let us know how we can benefit from programs out there. Get the word out to more businesses and streamline the process.

Have periodic meetings and communicate.

Make information more accessible and have agents and resources that can help with application process.

More outreach to these businesses to increase awareness of potential business with the city.

Inform business owners sooner and more frequently about these types of programs. We don't know what we're not told about.

Would like to have information in the bidding process for all opportunities in the area.

To reach out to all new MBE/WBE.

Respondents were particularly interested in additional support to facilitate relationship building between subcontractors/subconsultants and prime contractors/consultants.

Access to networking opportunities to grow my business.

Connections with more vendors and customers. More funding opportunities.

More exposure to the larger firms that we could subcontract with for City projects.

Relationships with larger companies and the availability to attain financing to scale.

Networking opportunities.

Matching/Speed dating but for organizations seeking to hire and business available to work.

Provide more information on consulting opportunities.

They need to do more networking & outreach with primes contractors.

I had to seek out the prime bidders. They did not contact me.

6. Experiences with business support services

Mentor-protégé programs, partnerships and JVs were seen as important approaches to help minority- and woman-owned businesses.

Having a mentor that loves to mentor that can lead me to the good resources.

Getting a loan and having a mentor to help guide me to make sure I have everything in order and to teach me on how I can keep growing.

Mentoring and financing [would help my business].

Support from the City and prime contractors and helping hand such as "protégé" program to help us.

Access to mentoring and startup funding to hire support staff would help my business deliver superior service on government projects. This would allow me to be able to compete at the same level as my non-minority counterparts.

Mentorship, marketing assistance, business plan development.

The constant process of running on a gerbil wheel is insane. I simply need a few partnerships that allows me the opportunity to work consistently.

Much like a college student has an advisor that sets out a 4 yr. plan and courses needed that build on each other. I'd grow with a business coach (not a scammer) who can say, here's where you need to invest, here's what you need to learn. A mentor who is a woman, who is a risk taker, who understands business today, has good business experience under her belt, would be a game changer.

More mentorship opportunities, guidance to navigate this unfamiliar space effectively.

To get more mentors and direct business coaching for small, minority businesses.

More training and support from the city with mentorship.

Being a part of a network of vendors who are searching to satisfy MWBE joint ventures.

Some M/WBE firms who had participated in joint ventures and mentor protégé programs reported good outcomes from these partnerships.

30% of our business is done by joint venture.

Joint ventures have allowed my firm the opportunity to win 5 year, 5-million-dollar contracts.

My first contract was a joint venture with another certified firm for a CATS [Consulting and technical Services] contract.

We partner (JV) with large General Contractors regularly. It has, overall, been a great experience.

Firms that participated in supportive services generally found them to be help-ful.

Some of the training has been good in preparing the company to get more projects.

They have provided more information for me to research and find out how I can position my company for success.

I have attended some webinars that were very helpful. We have also bid for two projects through Meckpro [vendor management system]. Although we did not get either, the bidding process was helpful and we do anticipate one day winning a bid.

These [supportive services] programs have been the difference between me keeping my business aspirations open and calling it quits, completely.

Innovate CLT has been going well and has been insightful.

They have given us insight into prospects for the future. We can develop a business plan and model in line with projects that are now available.

[Participating in supportive services programs] has been a great experience.

The programs are very good as to providing training and information to grow.

Business seminars [were helpful].

We have participated in SCORE for project plans. We welcome any other programs that has business support or development activities for MBEs/WBEs/SBEs.

The experience was 20 years ago. Today, I still have the relationships and connections made at that time.

The support group was very helpful.

Some respondents suggested supportive services programs could offer more comprehensive instruction and training to help develop concrete skills, techniques and strategies.

Business development virtual conferences have been helpful. Government contracting opportunity sessions have been less helpful. Once certified and registered to do business with the City, State or County, I've been seeking more in-depth information and support that the sessions do not provide ex: knowing when you're ready to scale up - how best to make that happen, how to identify hourly rates, what to pay subcontractors and the like.

Good information but I have not been able to convert into business/revenue generating opportunities.

We have had mixed success. It's mostly talk, and little concrete results.

You get some help, but not enough where it makes a difference of helping your company to the next level.

Another outreach program with no follow up support.

One firm noted that more outreach was needed to encourage participation in these programs.

Better outreach and advertisement to small businesses about the City's MBE/WBE/SBE program workshops.

Assistance with obtaining capital, bonding and insurance was cited by many M/WBE respondents as critical to increasing their capacity to take on more business.

Access to capital and opportunities.

A line of business line of credit.

Access to capital. I know what to do.

Having the funding to compete in the Charlotte market effectively.

More capital.

More financing.

Capital, as with any business will help my business prosper.

Reach out to minority funding and banking firms.

Several respondents noted that Black firms are in particular need of assistance in obtaining capital and access to financial resources.

It would be nice if there was a network of resources that are tailored toward assisting African American professionals obtain more business contracts, grants or loans.

More incentives of financial support for small black owned business, more financing.

Make it a little more easy [sic] for black on businesses to get loans.

L. Conclusion

The City of Charlotte's Business Inclusion Program has many of the elements of national best program practices. Overall, MWSBEs obtained work as prime vendors and subcontractors. Prime contractors were generally able to comply with Program requirements. The Program was supported by participants and was generally viewed as important to their growth and development. However, there are some challenges to address, including broadening outreach and increasing communication of prospective contracting opportunities; increasing access to insurance, bonding and capital; removing hurdles that make it difficult for subcontractors to move into the role of prime vendors; developing initiatives to facilitate relationships between MWSBEs and large firms; and expanding resources to assist firms with the City's contracting processes.

IV. CONTRACT DATA ANALYSIS FOR THE CITY OF CHARLOTTE

A. Contract Data Overview

We analyzed contract data for 2015 through 2020 for the City of Charlotte's locally funded contracts. The Initial Contract Data File contained 3,218 contracts. Because of the large number of contracts, CHA constructed a stratified random sample of 1,056 contracts.¹⁷⁸

In order to conduct the analysis of the sample of contracts, we constructed all the fields necessary for our analysis where they were missing in the City's contract records (*e.g.*, industry type; zip codes; six-digit North American Industry Classification System ("NAICS") codes of prime contractors and subcontractors; Minority-and Woman-owned Business Enterprise ("M/WBE")¹⁷⁹ subcontractor information, including payments, race, gender; etc.). Tables 4-1 through 4-2 provides data on the resulting Final Contract Data File ("FCDF").

Contract Type	Total Contracts	Share of Total Contracts
Prime Contracts	751	40.5%
Subcontracts	1,105	59.5%
TOTAL	1,856	100.0%

Table 4-1: Final Contract Data File

Source: CHA analysis of City of Charlotte data

^{178.} The sample was constructed by first stratifying the contract universe into its four industries components: Construction, Goods, Professional Services, and Services. With each component, we derived a random sample where distribution of contracts within that component across range of contract dollars approximated that distribution within the component universe. To achieve this, we separated the universe into thirds, with one third containing the contracts with the lowest contract dollars values, one third containing contracts with the highest contract dollars values, and a middle third containing the rest. For instance, in the Construction industry universe, the tercile with the highest contract dollars captured 90.8% of all of the construction contract dollars; in the Construction industry sample, the tercile with the highest contract dollars captured 91.6% of all of the construction industry contract dollars.

^{179.} As in other Chapters of this Report, we use the term "M/WBE" to encompass the specific State of North Carolina Historically Underutilized Business certification.

Business Type	Total Contract Dollars	Share of Total Contract Dollars
Prime Contracts	\$1,344,064,359	80.6%
Subcontracts	\$322,929,868	19.4%
TOTAL	\$1,666,994,227	100.0%

Table 4-2: Final Contract Data File Net Dollar Value

Source: CHA analysis of City of Charlotte data

The following sections present our analysis of the City of Charlotte's contracts. First, we determined the geographic and product markets for the analysis. Next, we estimated the utilization of M/WBEs by the City. Third, we used the FCDF, in combination with other databases (as described below), to calculate M/WBE unweighted and weighted availability in the City's marketplace. Finally, we analyzed whether there are any disparities between the City's utilization of M/WBEs and M/WBE weighted availability. These results, disaggregated into broad industry groupings, are presented in Appendix E.

B. The City of Charlotte's Geographic and Product Market

As discussed in Chapter II, the federal courts¹⁸⁰ require that a government agency narrowly tailor its race-conscious and gender-conscious contracting program elements to its geographic market area. This element of the analysis must be empirically established.¹⁸¹ The accepted approach is to analyze those detailed industries, as defined by six-digit NAICS codes,¹⁸² that make up at least 75% of the prime contract and subcontract payments for the study period.¹⁸³ The determination of the City's geographic and product market required three steps:

182. www.census.gov/eos/www/naics.

^{180.} *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 508 (1989) (Richmond was specifically faulted for including minority contractors from across the country in its program based on the national evidence that supported the USDOT DBE program); *see* 49 C.F.R. §26.45(c); https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise ("D. Explain How You Determined Your Local Market Area... your local market area is the area in which the substantial majority of the contractors and subcontractors with which you do business are located and the area in which you spend the substantial majority of your contracting dollars.").

^{181.} *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994) (to confine data to strict geographic boundaries would ignore "economic reality").

^{183.} J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program,* National Academies of Sciences, Engineering, and Medicine, 2010 (*"National Disparity Study Guidelines"*).

- 1. Develop the FCDF to determine the product market. These results are provided in Table 4-3.
- 2. Identify the geographic market.
- 3. Determine the product market given the geographic parameters. Table 4-4 presents these results.

1. The City's Final Contract Data File

The FCDF, which establishes the City's product market, consists of 161 NAICS codes with a total contract dollar value of \$1,666,994,227. Table 4-3 presents each NAICS code with its share of the total contract dollar value. The NAICS codes are presented from the code with the largest share to the smallest share.

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
237310	Highway, Street, and Bridge Construction	15.3%	15.3%
237110	Water and Sewer Line and Related Structures Construction	11.4%	26.7%
524114	Direct Health and Medical Insurance Carriers	8.6%	35.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	7.0%	42.4%
237990	Other Heavy and Civil Engineering Construction	5.3%	47.6%
541330	Engineering Services	5.0%	52.7%
236220	Commercial and Institutional Building Construction	4.5%	57.1%
481219	Other Nonscheduled Air Transportation	3.8%	60.9%
446110	Pharmacies and Drug Stores	3.7%	64.6%
238910	Site Preparation Contractors	2.9%	67.5%
236210	Industrial Building Construction	2.8%	70.3%
441110	New Car Dealers	2.3%	72.6%
238220	Plumbing, Heating, and Air-Conditioning Contractors	1.9%	74.5%
238110	Poured Concrete Foundation and Structure Contractors	1.6%	76.1%
238390	Other Building Finishing Contractors	1.3%	77.4%
454310	Fuel Dealers	1.3%	78.7%
484220	Specialized Freight (except Used Goods) Trucking, Local	1.2%	79.9%

Table 4-3: Industry Percentage Distribution of the City Contracts by Dollars

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
541512	Computer Systems Design Services	1.0%	80.8%
424690	Other Chemical and Allied Products Merchant Wholesalers	0.9%	81.7%
561730	Landscaping Services	0.8%	82.5%
541310	Architectural Services	0.8%	83.4%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	0.8%	84.1%
562212	Solid Waste Landfill	0.7%	84.8%
238290	Other Building Equipment Contractors	0.6%	85.4%
562219	Other Nonhazardous Waste Treatment and Disposal	0.6%	86.0%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	0.6%	86.6%
541380	Testing Laboratories	0.6%	87.2%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	0.6%	87.7%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.5%	88.3%
488490	Other Support Activities for Road Transportation	0.5%	88.8%
238990	All Other Specialty Trade Contractors	0.5%	89.3%
315210	Cut and Sew Apparel Contractors	0.5%	89.8%
423440	Other Commercial Equipment Merchant Wholesalers	0.5%	90.3%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.4%	90.7%
237120	Oil and Gas Pipeline and Related Structures Construction	0.4%	91.1%
541370	Surveying and Mapping (except Geophysical) Services	0.4%	91.5%
541519	Other Computer Related Services	0.4%	91.9%
238120	Structural Steel and Precast Concrete Contractors	0.4%	92.2%
562998	All Other Miscellaneous Waste Management Services	0.3%	92.6%
541611	Administrative Management and General Management Consulting Services	0.3%	92.9%
541320	Landscape Architectural Services	0.3%	93.2%
561621	Security Systems Services (except Locksmiths)	0.3%	93.5%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
541511	Custom Computer Programming Services	0.3%	93.7%
424710	Petroleum Bulk Stations and Terminals	0.3%	94.0%
561990	All Other Support Services	0.2%	94.2%
444190	Other Building Material Dealers	0.2%	94.4%
541620	Environmental Consulting Services	0.2%	94.6%
561320	Temporary Help Services	0.2%	94.8%
423490	Other Professional Equipment and Supplies Merchant Wholesalers	0.2%	95.0%
541690	Other Scientific and Technical Consulting Services	0.2%	95.1%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.2%	95.3%
561421	Telephone Answering Services	0.2%	95.5%
441320	Tire Dealers	0.2%	95.7%
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	0.2%	95.8%
423840	Industrial Supplies Merchant Wholesalers	0.2%	96.0%
238330	Flooring Contractors	0.2%	96.1%
561612	Security Guards and Patrol Services	0.2%	96.3%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.2%	96.5%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	0.1%	96.6%
562910	Remediation Services	0.1%	96.7%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	0.1%	96.9%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0.1%	97.0%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	0.1%	97.1%
621910	Ambulance Services	0.1%	97.2%
531210	Offices of Real Estate Agents and Brokers	0.1%	97.3%
811111	General Automotive Repair	0.1%	97.4%
561790	Other Services to Buildings and Dwellings	0.1%	97.5%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
238140	Masonry Contractors	0.1%	97.6%
517312	Wireless Telecommunications Carriers (except Satellite)	0.1%	97.7%
541612	Human Resources Consulting Services	0.1%	97.8%
561720	Janitorial Services	0.1%	97.9%
541990	All Other Professional, Scientific, and Technical Services	0.1%	98.0%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.1%	98.0%
541820	Public Relations Agencies	0.1%	98.1%
541613	Marketing Consulting Services	0.1%	98.2%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.1%	98.3%
541110	Offices of Lawyers	0.1%	98.3%
238150	Glass and Glazing Contractors	0.1%	98.4%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.1%	98.4%
238160	Roofing Contractors	0.1%	98.5%
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	0.1%	98.6%
561110	Office Administrative Services	0.1%	98.6%
812332	Industrial Launderers	0.1%	98.7%
238320	Painting and Wall Covering Contractors	0.1%	98.7%
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	0.05%	98.8%
336111	Automobile Manufacturing	0.05%	98.8%
237130	Power and Communication Line and Related Structures Construction	0.05%	98.9%
811213	Communication Equipment Repair and Maintenance	0.05%	98.9%
488119	Other Airport Operations	0.04%	99.0%
323111	Commercial Printing (except Screen and Books)	0.04%	99.0%
541350	Building Inspection Services	0.04%	99.1%
441310	Automotive Parts and Accessories Stores	0.04%	99.1%
541211	Offices of Certified Public Accountants	0.04%	99.1%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
444130	Hardware Stores	0.03%	99.2%
518210	Data Processing, Hosting, and Related Services	0.03%	99.2%
424130	Industrial and Personal Service Paper Merchant Wholesalers	0.03%	99.2%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0.03%	99.3%
541430	Graphic Design Services	0.03%	99.3%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.03%	99.3%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	0.03%	99.3%
517911	Telecommunications Resellers	0.03%	99.4%
541930	Translation and Interpretation Services	0.03%	99.4%
423390	Other Construction Material Merchant Wholesalers	0.03%	99.4%
423210	Furniture Merchant Wholesalers	0.02%	99.4%
238310	Drywall and Insulation Contractors	0.02%	99.5%
562991	Septic Tank and Related Services	0.02%	99.5%
531320	Offices of Real Estate Appraisers	0.02%	99.5%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	0.02%	99.5%
562111	Solid Waste Collection	0.02%	99.6%
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	0.02%	99.6%
562112	Hazardous Waste Collection	0.02%	99.6%
519110	News Syndicates	0.02%	99.6%
811113	Automotive Transmission Repair	0.02%	99.6%
611430	Professional and Management Development Training	0.02%	99.7%
561710	Exterminating and Pest Control Services	0.02%	99.7%
811192	Car Washes	0.02%	99.7%
484110	General Freight Trucking, Local	0.02%	99.7%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	0.02%	99.7%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
424590	Other Farm Product Raw Material Merchant Wholesalers	0.02%	99.7%
512191	Teleproduction and Other Postproduction Services	0.02%	99.8%
424910	Farm Supplies Merchant Wholesalers	0.02%	99.8%
541513	Computer Facilities Management Services	0.02%	99.8%
238340	Tile and Terrazzo Contractors	0.01%	99.8%
562211	Hazardous Waste Treatment and Disposal	0.01%	99.8%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.01%	99.8%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	0.01%	99.8%
541810	Advertising Agencies	0.01%	99.9%
238130	Framing Contractors	0.01%	99.9%
238350	Finish Carpentry Contractors	0.01%	99.9%
335910	Battery Manufacturing	0.01%	99.9%
561311	Employment Placement Agencies	0.01%	99.9%
532112	Passenger Car Leasing	0.01%	99.9%
561920	Convention and Trade Show Organizers	0.01%	99.9%
561330	Professional Employer Organizations	0.01%	99.9%
512110	Motion Picture and Video Production	0.01%	99.9%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	0.01%	99.9%
722320	Caterers	0.01%	99.9%
541420	Industrial Design Services	0.01%	99.9%
541910	Marketing Research and Public Opinion Polling	0.01%	99.9%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.01%	100.0%
115310	Support Activities for Forestry	0.01%	100.0%
488410	Motor Vehicle Towing	0.004%	100.0%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.004%	100.0%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	0.004%	100.0%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	0.004%	100.0%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0.004%	100.0%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	0.004%	100.0%
541840	Media Representatives	0.003%	100.0%
624190	Other Individual and Family Services	0.003%	100.0%
236115	New Single-Family Housing Construction (except For- Sale Builders)	0.003%	100.0%
561613	Armored Car Services	0.003%	100.0%
541720	Research and Development in the Social Sciences and Humanities	0.002%	100.0%
532310	General Rental Centers	0.002%	100.0%
624229	Other Community Housing Services	0.001%	100.0%
238170	Siding Contractors	0.0005%	100.0%
541490	Other Specialized Design Services	0.0005%	100.0%
541922	Commercial Photography	0.0004%	100.0%
561440	Collection Agencies	0.0002%	100.0%
541618	Other Management Consulting Services	0.0002%	100.0%
541921	Photography Studios, Portrait	0.0001%	100.0%
517311	Wired Telecommunications Carriers	0.00003%	100.0%
TOTAL		100.0%	

Source: CHA analysis of City of Charlotte data

2. The City's Geographic Market

To determine the geographic market area, we applied the standard of identifying the firm locations that account for at least 75% of contract and subcontract dollar payments in the FCDF.¹⁸⁴ Firm location was determined by zip code and aggregated into counties as the geographic unit. We first examined the 13 counties contained in the Charlotte Consolidated Statistical Area ("CSA"). Contracts awarded to these firms accounted for only 58.6% of the FCDF. There-

^{184.} National Disparity Study Guidelines, at p. 29.

fore, analyzing this subset of the FCDF would not paint a defensible picture of the City's procurement activity. We next explored a geographic market consisting of the State of North Carolina and York County in South Carolina. Firms within these parameters accounted for 74.0% of the FCDF. As this came very close to the standard, we used North Carolina and York County as the geographic market.¹⁸⁵

C. The City's Utilization of M/WBEs in its Geographic and Product Market

Having determined the City's geographic market area, the next step was to determine the dollar value of the City's utilization of M/WBEs¹⁸⁶ as measured by net payments to prime firms and subcontractors and disaggregated by race and gender. There are 137 NAICS codes after constraining the FCDF by the geographic market; the dollar value of the contracts in these codes is \$1,233,088,925. Tables 4-4 presents these data. We note that the contract dollar shares in Table 4-4 are equivalent to the weight of spending in each NAICS code. These data were used to calculate weighted availability¹⁸⁷ from unweighted availability, as discussed below.

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
237310	Highway, Street, and Bridge Construction	\$249,645,600.00	20.2%
237110	Water and Sewer Line and Related Structures Construction	\$185,646,016.00	15.1%
524114	Direct Health and Medical Insurance Carriers	\$135,294,000.00	11.0%

Table 4-4: NAICS Code Distribution of Contract Dollars in the Constrained Product Market

^{185.} In addition to York, two other counties in South Carolina are in the Charlotte CSA. However, no firms located in Chester County received contracts and the one firm in Lancaster County that received a contract accounted for just 0.0016% of the FCDF.

^{186.} For our analysis, the term "M/WBE" includes firms that are certified by government agencies, including HUBs under North Carolina's program, and minority- and woman-owned firms that are not certified. As discussed in Chapter II, the inclusion of all minority- and female-owned businesses in the pool casts the broad net approved by the courts and that supports the remedial nature of these programs. *See Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 723 (7th Cir. 2007) (The "remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net.").

^{187.} See "Tips for Goal Setting in the Disadvantaged Business Enterprise Program" ("F. Wherever Possible, Use Weighting. Weighting can help ensure that your Step One Base Figure is as accurate as possible. While weighting is not required by the rule, it will make your goal calculation more accurate. For instance, if 90% of your contract dollars will be spent on heavy construction and 10% on trucking, you should weight your calculation of the relative availability of firms by the same percentages.") (emphasis in the original), https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise.

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
541330	Engineering Services	\$71,340,016.00	5.8%
237990	Other Heavy and Civil Engineering Construction	\$64,495,988.00	5.2%
481219	Other Nonscheduled Air Transportation	\$63,472,480.00	5.1%
446110	Pharmacies and Drug Stores	\$61,545,836.00	5.0%
236210	Industrial Building Construction	\$43,693,912.00	3.5%
238910	Site Preparation Contractors	\$43,198,832.00	3.5%
236220	Commercial and Institutional Building Construction	\$41,931,768.00	3.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$34,939,764.00	2.8%
238110	Poured Concrete Foundation and Structure Contractors	\$23,617,028.00	1.9%
484220	Specialized Freight (except Used Goods) Trucking, Local	\$18,336,402.00	1.5%
441110	New Car Dealers	\$16,982,622.00	1.4%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$14,486,622.00	1.2%
561730	Landscaping Services	\$11,761,252.00	1.0%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$11,136,529.00	0.9%
238290	Other Building Equipment Contractors	\$9,922,984.00	0.8%
238990	All Other Specialty Trade Contractors	\$8,724,604.00	0.7%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	\$8,128,558.50	0.7%
541519	Other Computer Related Services	\$5,970,614.50	0.5%
238120	Structural Steel and Precast Concrete Contractors	\$5,810,421.50	0.5%
541370	Surveying and Mapping (except Geophysical) Services	\$5,774,652.30	0.5%
541310	Architectural Services	\$5,297,129.50	0.4%
541380	Testing Laboratories	\$5,073,486.50	0.4%
562998	All Other Miscellaneous Waste Management Services	\$4,950,000.00	0.4%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	\$4,852,870.00	0.4%
541611	Administrative Management and General Management Consulting Services	\$4,353,900.00	0.4%

423830Industrial Machinery and Equipment Merchant Wholesalers\$3,975,933.250.3%541320Landscape Architectural Services\$3,370,347.250.3%561990All Other Support Services\$2,2970,636.750.2%541620Environmental Consulting Services\$2,2917,050.250.2%541620Environmental Consulting Services\$2,201,050.250.2%561612Security Guards and Patrol Services\$2,220,629.750.2%562910Remediation Services\$2,220,7584.000.2%238390Other Building Material Dealers\$2,207,584.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423710Other Suildings and Other Metal Merchant Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Foundation, Structure, and Building Exterior Contractors\$1,584,260.750.1%561720Janitorial Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services (except Locksmiths)\$1,409,832.620.1%561720Janitorial Services\$1,351,221.620.1%541820Public Related Construction Material Merchant Wholesalers\$1,129,876.750.1%541820Public Related Construction Material Merchant Wholesalers\$1,001,367.880.1%541820Public Relations Agencies\$1,001,367.88 <td< th=""><th>NAICS</th><th>NAICS Code Description</th><th>Total Contract Dollars</th><th>Pct Total Contract Dollars</th></td<>	NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
423830 Wholesalers \$3,97,5,93.25 0.3% 541320 Landscape Architectural Services \$3,370,347.25 0.3% 561990 All Other Support Services \$2,2970,636.75 0.2% 541202 Environmental Consulting Services \$2,2917,050.25 0.2% 541228 Motorcycle, ATV, and All Other Motor Vehicle Dealers \$2,229,481.50 0.2% 556121 Security Guards and Patrol Services \$2,250,225.75 0.2% 562910 Remediation Services \$2,207,584.00 0.2% 54129 Other Building Material Dealers \$2,207,584.00 0.2% 523910 Ambulance Services \$1,944,898.75 0.2% 423720 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers \$1,933,495.75 0.2% 423510 Metal Service Centers and Other Metal Merchant Wholesalers \$1,839,053.25 0.1% 51111 General Automotive Repair \$1,584,260.75 0.1% 52310 Other Foundation, Structure, and Building Exterior Contractors \$1,563,702.12 0.1% 523120 Other Foundation, Structure, and Buildi	424710	Petroleum Bulk Stations and Terminals	\$4,306,609.50	0.3%
561990 All Other Support Services \$2,970,636.75 0.2% 541620 Environmental Consulting Services \$2,917,050.25 0.2% 441228 Motorcycle, ATV, and All Other Motor Vehicle Dealers \$2,829,481.50 0.2% 561612 Security Guards and Patrol Services \$2,200,629.75 0.2% 562910 Remediation Services \$2,207,584.00 0.2% 238390 Other Building Material Dealers \$2,207,584.00 0.2% 238390 Other Building Finishing Contractors \$2,121,397.00 0.2% 423720 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers \$1,933,495.75 0.2% 423710 Metal Service Centers and Other Metal Merchant Wholesalers \$1,727,486.62 0.1% 56190 Other Services to Buildings and Dwellings \$1,584,260.75 0.1% 238190 Other Foundation, Structure, and Building Exterior Contractors \$1,563,702.12 0.1% 561720 Janitorial Services (except Locksmiths) \$1,490,832.62 0.1% 561720 Janitorial Services (except Locksmiths) \$1,490,832.62 0.1%	423830		\$3,975,933.25	0.3%
541620 Environmental Consulting Services \$2,917,050.25 0.2% 441228 Motorcycle, ATV, and All Other Motor Vehicle Dealers \$2,829,481.50 0.2% 561612 Security Guards and Patrol Services \$2,620,629.75 0.2% 562910 Remediation Services \$2,207,584.00 0.2% 238390 Other Building Material Dealers \$2,207,584.00 0.2% 621910 Ambulance Services \$1,944,898.75 0.2% 423720 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers \$1,933,495.75 0.2% 423710 Metal Service Centers and Other Metal Merchant Wholesalers \$1,727,486.62 0.1% 811111 General Automotive Repair \$1,727,486.62 0.1% 238190 Other Foundation, Structure, and Building Exterior Contractors \$1,583,910.38 0.1% 23810 Masonry Contractors \$1,490,832.62 0.1% 561720 Janitorial Services (except Locksmiths) \$1,490,832.62 0.1% 561720 Janitorial Services \$1,091,367.88 0.1% 5238100 Other Foundation, Structure, a	541320	Landscape Architectural Services	\$3,370,347.25	0.3%
441228Motorcycle, ATV, and All Other Motor Vehicle Dealers\$2,829,481.500.2%561612Security Guards and Patrol Services\$2,620,629.750.2%562910Remediation Services\$2,250,225.750.2%444190Other Building Material Dealers\$2,207,584.000.2%238390Other Building Finishing Contractors\$2,121,397.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%561790Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561720Janitorial Services\$1,351,221.620.1%561720Janitorial Services\$1,351,221.620.1%561720Janitorial Services\$1,091,367.880.1%238140Masonry Contractors\$1,094,252.880.1%561720Janitorial Services\$1,351,221.620.1%561720Janitorial Services\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,091,367.880.1%541820Public Relations Agencies\$1,091,367.880.1%541820Public Relations Agencies\$1,091,367.880.1%541820Public Relations Agencies\$1,091,367.880.1%541820Public Relations A	561990	All Other Support Services	\$2,970,636.75	0.2%
561612Security Guards and Patrol Services\$2,620,629.750.2%562910Remediation Services\$2,250,225.750.2%444190Other Building Material Dealers\$2,207,584.000.2%238390Other Building Finishing Contractors\$2,121,397.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%81111General Automotive Repair\$1,727,486.620.1%561790Other Foundation, Structure, and Building Exterior Contractors\$1,563,702.120.1%238140Masonry Contractors\$1,563,702.120.1%561720Janitorial Services\$1,351,221.620.1%561720Janitorial Services\$1,129,876.750.1%238140Masonry Contractors\$1,129,876.750.1%561720Janitorial Services\$1,21,22,880.1%541820Public Relation Agencies\$1,091,367.880.1%541820Public Relations Agencies\$1,091,367.880.1%53150Glass and Glazing Contractors\$1,049,952.120.1%53110Office Administrative Services\$992,753.690.1%	541620	Environmental Consulting Services	\$2,917,050.25	0.2%
562910Remediation Services\$2,250,225.750.2%444190Other Building Material Dealers\$2,207,584.000.2%238390Other Building Finishing Contractors\$2,121,397.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%81111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,563,702.120.1%56121Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238160Glass and Glazing Contractors\$1,049,952.120.1%551110Office Administrative Services\$992,753.690.1%	441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	\$2,829,481.50	0.2%
444190Other Building Material Dealers\$2,207,584.000.2%238390Other Building Finishing Contractors\$2,121,397.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings Contractors\$1,583,910.380.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238160Glass and Glazing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	561612	Security Guards and Patrol Services	\$2,620,629.75	0.2%
238390Other Building Finishing Contractors\$2,121,397.000.2%621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%238120Oil and Gas Pipeline and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%238150Glass and Glazing Contractors\$1,049,952.120.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	562910	Remediation Services	\$2,250,225.75	0.2%
621910Ambulance Services\$1,944,898.750.2%423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%561720Janitorial Services\$1,351,221.620.1%238140Mechant Wholesalers\$1,129,876.750.1%561720Janitorial Services\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,049,952.120.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	444190	Other Building Material Dealers	\$2,207,584.00	0.2%
423720Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings Contractors\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%238150Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	238390	Other Building Finishing Contractors	\$2,121,397.00	0.2%
423720(Hydronics) Merchant Wholesalers\$1,933,495.750.2%423510Metal Service Centers and Other Metal Merchant Wholesalers\$1,839,053.250.1%81111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%238150Oil and Gas Pipeline and Related Structures Construction\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,049,952.120.1%238160Roofing Contractors\$1,049,952.120.1%	621910	Ambulance Services	\$1,944,898.75	0.2%
423510Wholesalers\$1,839,053.250.1%811111General Automotive Repair\$1,727,486.620.1%561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	423720		\$1,933,495.75	0.2%
561790Other Services to Buildings and Dwellings\$1,584,260.750.1%238190Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%541820Public Relations Agencies\$1,094,252.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	423510		\$1,839,053.25	0.1%
238190Other Foundation, Structure, and Building Exterior Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238160Glass and Glazing Contractors\$1,078,541.500.1%561110Office Administrative Services\$992,753.690.1%	811111	General Automotive Repair	\$1,727,486.62	0.1%
238190Contractors\$1,583,910.380.1%238140Masonry Contractors\$1,563,702.120.1%561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	561790	Other Services to Buildings and Dwellings	\$1,584,260.75	0.1%
561621Security Systems Services (except Locksmiths)\$1,490,832.620.1%561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	238190		\$1,583,910.38	0.1%
561720Janitorial Services\$1,351,221.620.1%423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	238140	Masonry Contractors	\$1,563,702.12	0.1%
423320Brick, Stone, and Related Construction Material Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	561621	Security Systems Services (except Locksmiths)	\$1,490,832.62	0.1%
423320Merchant Wholesalers\$1,129,876.750.1%237120Oil and Gas Pipeline and Related Structures Construction\$1,094,252.880.1%541820Public Relations Agencies\$1,091,367.880.1%238150Glass and Glazing Contractors\$1,078,541.500.1%238160Roofing Contractors\$1,049,952.120.1%561110Office Administrative Services\$992,753.690.1%	561720	Janitorial Services	\$1,351,221.62	0.1%
541820 Public Relations Agencies \$1,091,367.88 0.1% 238150 Glass and Glazing Contractors \$1,078,541.50 0.1% 238160 Roofing Contractors \$1,049,952.12 0.1% 561110 Office Administrative Services \$992,753.69 0.1%	423320		\$1,129,876.75	0.1%
238150 Glass and Glazing Contractors \$1,078,541.50 0.1% 238160 Roofing Contractors \$1,049,952.12 0.1% 561110 Office Administrative Services \$992,753.69 0.1%	237120	Oil and Gas Pipeline and Related Structures Construction	\$1,094,252.88	0.1%
238160 Roofing Contractors \$1,049,952.12 0.1% 561110 Office Administrative Services \$992,753.69 0.1%	541820	Public Relations Agencies	\$1,091,367.88	0.1%
561110Office Administrative Services\$992,753.690.1%	238150	Glass and Glazing Contractors	\$1,078,541.50	0.1%
	238160	Roofing Contractors	\$1,049,952.12	0.1%
238320Painting and Wall Covering Contractors\$954,803.000.1%	561110	Office Administrative Services	\$992,753.69	0.1%
	238320	Painting and Wall Covering Contractors	\$954,803.00	0.1%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$888,282.75	0.1%
238330	Flooring Contractors	\$874,172.44	0.1%
541990	All Other Professional, Scientific, and Technical Services	\$815,580.81	0.1%
811213	Communication Equipment Repair and Maintenance	\$775,577.25	0.1%
541511	Custom Computer Programming Services	\$735,510.50	0.1%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	\$721,451.69	0.1%
488119	Other Airport Operations	\$715,505.38	0.1%
541350	Building Inspection Services	\$622,202.19	0.1%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	\$621,288.00	0.1%
323111	Commercial Printing (except Screen and Books)	\$604,691.75	0.05%
441310	Automotive Parts and Accessories Stores	\$600,000.00	0.05%
424130	Industrial and Personal Service Paper Merchant Wholesalers	\$507,684.94	0.04%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	\$492,908.69	0.04%
541110	Offices of Lawyers	\$462,228.22	0.04%
488490	Other Support Activities for Road Transportation	\$458,807.84	0.04%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	\$442,000.00	0.04%
517911	Telecommunications Resellers	\$430,989.88	0.03%
238310	Drywall and Insulation Contractors	\$410,787.41	0.03%
562991	Septic Tank and Related Services	\$387,107.78	0.03%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$377,231.56	0.03%
531320	Offices of Real Estate Appraisers	\$376,618.81	0.03%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	\$376,047.56	0.03%
562111	Solid Waste Collection	\$369,844.72	0.03%
562112	Hazardous Waste Collection	\$348,203.44	0.03%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
561710	Exterminating and Pest Control Services	\$306,426.25	0.02%
484110	General Freight Trucking, Local	\$301,484.97	0.02%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	\$287,981.56	0.02%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$268,605.88	0.02%
424590	Other Farm Product Raw Material Merchant Wholesalers	\$266,200.00	0.02%
424910	Farm Supplies Merchant Wholesalers	\$263,277.66	0.02%
611430	Professional and Management Development Training	\$259,536.00	0.02%
531210	Offices of Real Estate Agents and Brokers	\$255,385.52	0.02%
811192	Car Washes	\$247,679.06	0.02%
541613	Marketing Consulting Services	\$242,254.17	0.02%
315210	Cut and Sew Apparel Contractors	\$228,842.70	0.02%
541430	Graphic Design Services	\$226,820.02	0.02%
238340	Tile and Terrazzo Contractors	\$225,000.00	0.02%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	\$213,474.34	0.02%
562212	Solid Waste Landfill	\$209,761.86	0.02%
541810	Advertising Agencies	\$207,754.72	0.02%
238130	Framing Contractors	\$194,814.48	0.02%
238350	Finish Carpentry Contractors	\$194,650.72	0.02%
335910	Battery Manufacturing	\$181,095.47	0.01%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$174,920.19	0.01%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	\$160,000.00	0.01%
541612	Human Resources Consulting Services	\$158,767.81	0.01%
541512	Computer Systems Design Services	\$153,964.08	0.01%
561421	Telephone Answering Services	\$143,670.59	0.01%
561311	Employment Placement Agencies	\$130,500.00	0.01%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
532112	Passenger Car Leasing	\$123,102.30	0.01%
561920	Convention and Trade Show Organizers	\$122,101.39	0.01%
423390	Other Construction Material Merchant Wholesalers	\$121,986.00	0.01%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	\$121,594.29	0.01%
561330	Professional Employer Organizations	\$119,572.99	0.01%
512110	Motion Picture and Video Production	\$116,790.94	0.01%
722320	Caterers	\$100,908.86	0.01%
541910	Marketing Research and Public Opinion Polling	\$95,000.00	0.01%
444130	Hardware Stores	\$95,000.00	0.01%
561320	Temporary Help Services	\$92,324.25	0.01%
488410	Motor Vehicle Towing	\$68,632.50	0.01%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$63,422.15	0.01%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	\$60,290.23	0.005%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	\$59,258.18	0.005%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	\$58,487.11	0.005%
541840	Media Representatives	\$54,575.00	0.004%
423210	Furniture Merchant Wholesalers	\$52,913.44	0.004%
236115	New Single-Family Housing Construction (except For- Sale Builders)	\$50,255.00	0.004%
541614	Process, Physical Distribution, and Logistics Consulting Services	\$49,623.00	0.004%
423440	Other Commercial Equipment Merchant Wholesalers	\$33,205.62	0.003%
532310	General Rental Centers	\$26,513.25	0.002%
541211	Offices of Certified Public Accountants	\$23,502.19	0.002%
541420	Industrial Design Services	\$18,300.00	0.001%
541690	Other Scientific and Technical Consulting Services	\$17,810.00	0.001%
518210	Data Processing, Hosting, and Related Services	\$15,155.54	0.001%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
512191	Teleproduction and Other Postproduction Services	\$10,100.00	0.001%
238170	Siding Contractors	\$8,312.50	0.001%
541490	Other Specialized Design Services	\$8,257.50	0.001%
541922	Commercial Photography	\$6,123.16	0.0005%
237130	Power and Communication Line and Related Structures Construction	\$5,649.10	0.0005%
561440	Collection Agencies	\$3,127.55	0.0003%
541618	Other Management Consulting Services	\$2,800.00	0.0002%
541921	Photography Studios, Portrait	\$1,877.20	0.0002%
517311	Wired Telecommunications Carriers	\$562.50	0.00005%
TOTAL		\$1,233,088,925	100.0%

Source: CHA analysis of City of Charlotte data

Tables 4-5 and 4-6 present data on the City's M/WBE utilization, measured in contract dollars and percentage of contract dollars.

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
236115	\$50,255	\$0	\$0	\$0	\$50,255	\$0	\$50,255	\$0	\$50,255
236210	\$2,253,877	\$0	\$0	\$0	\$2,253,877	\$6,012,960	\$8,266,837	\$35,427,075	\$43,693,912
236220	\$674,064	\$0	\$0	\$0	\$674,064	\$169,120	\$843,184	\$41,088,585	\$41,931,769
237110	\$44,960	\$484,555	\$0	\$5,844,659	\$6,374,174	\$19,528,212	\$25,902,386	\$159,743,627	\$185,646,013
237120	\$0	\$0	\$0	\$0	\$0	\$912,911	\$912,911	\$181,342	\$1,094,253
237130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,649	\$5,649
237310	\$937,863	\$3,142,520	\$1,044,918	\$0	\$5,125,301	\$16,114,033	\$21,239,334	\$228,406,272	\$249,645,606
237990	\$0	\$0	\$15,269,613	\$572,379	\$15,841,992	\$14,212	\$15,856,204	\$48,639,783	\$64,495,987
238110	\$292,494	\$0	\$0	\$0	\$292,494	\$516,547	\$809,041	\$22,807,987	\$23,617,028
238120	\$0	\$2,893,539	\$0	\$0	\$2,893,539	\$0	\$2,893,539	\$2,916,883	\$5,810,422
238130	\$0	\$194,314	\$0	\$0	\$194,314	\$0	\$194,314	\$500	\$194,814
238140	\$0	\$0	\$0	\$0	\$0	\$872,418	\$872,418	\$691,284	\$1,563,702
238150	\$217,976	\$0	\$0	\$576,107	\$794,082	\$222,759	\$1,016,841	\$61,700	\$1,078,541
238160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,049,952	\$1,049,952
238170	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,312	\$8,312
238190	\$0	\$36,499	\$0	\$0	\$36,499	\$0	\$36,499	\$1,547,411	\$1,583,910
238210	\$2,809,497	\$2,122,524	\$0	\$0	\$4,932,021	\$3,725,657	\$8,657,678	\$26,282,084	\$34,939,763
238220	\$322,744	\$0	\$0	\$95,910	\$418,654	\$1,096,480	\$1,515,134	\$12,971,488	\$14,486,622
238290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,922,984	\$9,922,984
238310	\$223,476	\$0	\$0	\$0	\$223,476	\$0	\$223,476	\$187,312	\$410,787
238320	\$47,665	\$298,278	\$0	\$0	\$345,943	\$70,250	\$416,193	\$538,610	\$954,803
238330	\$80,457	\$0	\$0	\$0	\$80,457	\$243,715	\$324,172	\$550,000	\$874,172

Table 4-5: Distribution of Contract Dollars by Race and Gender (total dollars)

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NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
238340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225,000	\$225,000
238350	\$4,739	\$0	\$0	\$19,218	\$23,957	\$158,733	\$182,690	\$11,960	\$194,651
238390	\$0	\$256,624	\$0	\$0	\$256,624	\$170,933	\$427,557	\$1,693,839	\$2,121,397
238910	\$512,628	\$2,400	\$0	\$3,475,166	\$3,990,195	\$1,485,192	\$5,475,387	\$37,723,446	\$43,198,833
238990	\$105,473	\$7,535	\$0	\$447,842	\$560,850	\$1,934,359	\$2,495,209	\$6,229,395	\$8,724,604
315210	\$0	\$0	\$228,843	\$0	\$228,843	\$0	\$228,843	\$0	\$228,843
323111	\$0	\$0	\$198	\$0	\$198	\$0	\$198	\$604,493	\$604,692
335910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$181,095	\$181,095
336350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$376,048	\$376,048
423110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,128,559	\$8,128,559
423120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,136,529	\$11,136,529
423210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,913	\$52,913
423320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,129,877	\$1,129,877
423390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$121,986	\$121,986
423440	\$0	\$0	\$0	\$0	\$0	\$2,963	\$2,963	\$30,242	\$33,206
423450	\$0	\$0	\$99,000	\$0	\$99,000	\$0	\$99,000	\$169,606	\$268,606
423510	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,839,053	\$1,839,053
423610	\$0	\$0	\$0	\$0	\$0	\$402,510	\$402,510	\$485,773	\$888,283
423690	\$34,199	\$0	\$0	\$0	\$34,199	\$343,032	\$377,231	\$0	\$377,232
423720	\$O	\$0	\$0	\$0	\$0	\$1,688,480	\$1,688,480	\$245,015	\$1,933,496
423730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,290	\$60,290
423810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160,000	\$160,000
423830	\$0	\$0	\$695,173	\$0	\$695,173	\$102	\$695,275	\$3,280,658	\$3,975,933
423850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$721,452	\$721,452
423910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$287,982	\$287,982

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
423990	\$0	\$0	\$0	\$0	\$0	\$13,167	\$13,167	\$608,121	\$621,288
424130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$507,685	\$507,685
424210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,422	\$63,422
424320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,487	\$58,487
424330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$213,474	\$213,474
424590	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$266,200	\$266,200
424690	\$0	\$0	\$0	\$0	\$0	\$70,357	\$70,357	\$104,563	\$174,920
424710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,306,610	\$4,306,610
424720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$121,594	\$121,594
424910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$263,278	\$263,278
424990	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59,258	\$59,258
441110	\$0	\$0	\$0	\$0	\$0	\$600,000	\$600,000	\$16,382,622	\$16,982,622
441228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,829,481	\$2,829,481
441310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000	\$600,000
444130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000	\$95,000
444190	\$0	\$120,000	\$0	\$0	\$120,000	\$2,066,707	\$2,186,707	\$20,877	\$2,207,584
446110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,545,836	\$61,545,836
481219	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,472,480	\$63,472,480
484110	\$0	\$0	\$0	\$0	\$0	\$301,485	\$301,485	\$0	\$301,485
484220	\$11,357,110	\$1,138,097	\$42,676	\$901,934	\$13,439,816	\$3,301,993	\$16,741,809	\$1,594,592	\$18,336,401
488119	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$715,505	\$715,505
488410	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,632	\$68,632
488490	\$0	\$0	\$0	\$0	\$0	\$4,794	\$4,794	\$454,014	\$458,808
512110	\$0	\$0	\$0	\$0	\$0	\$10,240	\$10,240	\$106,551	\$116,791
512191	\$10,100	\$0	\$0	\$0	\$10,100	\$0	\$10,100	\$0	\$10,100

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
517311	\$0	\$0	\$0	\$0	\$0	\$562	\$562	\$0	\$562
517911	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$430,990	\$430,990
518210	\$0	\$0	\$0	\$0	\$0	\$15,156	\$15,156	\$0	\$15,156
524114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,294,000	\$135,294,000
531210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$255,386	\$255,386
531320	\$0	\$0	\$0	\$0	\$0	\$9,450	\$9,450	\$367,169	\$376,619
532112	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$123,102	\$123,102
532310	\$O	\$0	\$0	\$0	\$0	\$0	\$0	\$26,513	\$26,513
532412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$492,909	\$492,909
541110	\$101,204	\$0	\$0	\$0	\$101,204	\$0	\$101,204	\$361,024	\$462,228
541211	\$O	\$0	\$0	\$0	\$0	\$0	\$0	\$23,502	\$23,502
541310	\$209,920	\$320,904	\$0	\$0	\$530,824	\$0	\$530,824	\$4,766,305	\$5,297,129
541320	\$26 <i>,</i> 685	\$0	\$0	\$0	\$26,685	\$0	\$26,685	\$3,343,663	\$3,370,347
541330	\$467,788	\$48,140	\$41,748	\$541,301	\$1,098,977	\$376,644	\$1,475,621	\$69,864,399	\$71,340,020
541350	\$300,685	\$0	\$0	\$0	\$300,685	\$0	\$300,685	\$321,517	\$622,202
541370	\$0	\$15,728	\$34,350	\$0	\$50,078	\$2,184,023	\$2,234,101	\$3,540,553	\$5,774,653
541380	\$601,193	\$0	\$0	\$0	\$601,193	\$83,767	\$684,960	\$4,388,527	\$5,073,487
541420	\$18,300	\$0	\$0	\$0	\$18,300	\$0	\$18,300	\$0	\$18,300
541430	\$0	\$0	\$24,645	\$0	\$24,645	\$202,175	\$226,820	\$0	\$226,820
541490	\$0	\$0	\$0	\$0	\$0	\$8,258	\$8,258	\$0	\$8,258
541511	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$735,511	\$735,511
541512	\$0	\$46,300	\$0	\$0	\$46,300	\$50,000	\$96,300	\$57,664	\$153,964
541519	\$0	\$0	\$5,970,614	\$0	\$5,970,614	\$0	\$5,970,614	\$0	\$5,970,614
541611	\$430,569	\$0	\$0	\$0	\$430,569	\$42,098	\$472,667	\$3,881,234	\$4,353,900
541612	\$0	\$0	\$0	\$0	\$0	\$158,768	\$158,768	\$0	\$158,768

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
541613	\$0	\$0	\$0	\$0	\$0	\$94,472	\$94,472	\$147,782	\$242,254
541614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,623	\$49,623
541618	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800	\$2,800
541620	\$0	\$108,826	\$0	\$0	\$108,826	\$175,680	\$284,506	\$2,632,544	\$2,917,050
541690	\$0	\$0	\$0	\$0	\$0	\$6,000	\$6,000	\$11,810	\$17,810
541810	\$0	\$0	\$0	\$0	\$0	\$207,755	\$207,755	\$0	\$207,755
541820	\$34,800	\$0	\$0	\$0	\$34,800	\$316,372	\$351,172	\$740,196	\$1,091,368
541840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,575	\$54,575
541910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000	\$95,000
541921	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,877	\$1,877
541922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,123	\$6,123
541990	\$159,130	\$5,033	\$0	\$0	\$164,163	\$49,818	\$213,981	\$601,600	\$815,581
561110	\$0	\$0	\$0	\$0	\$0	\$83,650	\$83,650	\$909,104	\$992,754
561311	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130,500	\$130,500
561320	\$11,313	\$0	\$0	\$0	\$11,313	\$49,500	\$60,813	\$31,511	\$92,324
561330	\$0	\$0	\$0	\$0	\$0	\$70,057	\$70,057	\$49,516	\$119,573
561421	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$143,671	\$143,671
561440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,128	\$3,128
561612	\$38,564	\$0	\$0	\$0	\$38,564	\$225,600	\$264,164	\$2,356,466	\$2,620,630
561621	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,490,833	\$1,490,833
561710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$306,426	\$306,426
561720	\$399,811	\$0	\$0	\$0	\$399,811	\$946,735	\$1,346,546	\$4,675	\$1,351,222
561730	\$2,455,677	\$106,731	\$0	\$620,428	\$3,182,835	\$3,560,105	\$6,742,940	\$5,018,312	\$11,761,252
561790	\$1,584,261	\$0	\$0	\$0	\$1,584,261	\$0	\$1,584,261	\$0	\$1,584,261
561920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$122,101	\$122,101

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
561990	\$1,618,196	\$0	\$40,728	\$1,550	\$1,660,473	\$206,401	\$1,866,874	\$1,103,762	\$2,970,637
562111	\$37,921	\$0	\$0	\$90,359	\$128,280	\$30,840	\$159,120	\$210,724	\$369,845
562112	\$346,000	\$0	\$0	\$0	\$346,000	\$2,203	\$348,203	\$0	\$348,203
562212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,762	\$209,762
562910	\$0	\$0	\$0	\$0	\$0	\$178,710	\$178,710	\$2,071,516	\$2,250,226
562991	\$386,934	\$0	\$0	\$0	\$386,934	\$0	\$386,934	\$174	\$387,108
562998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,950,000	\$4,950,000
611430	\$125,736	\$0	\$0	\$0	\$125,736	\$73,800	\$199,536	\$60,000	\$259,536
621910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,944,899	\$1,944,899
722320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,909	\$100,909
811111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,727,487	\$1,727,487
811121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$442,000	\$442,000
811192	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,679	\$247,679
811213	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$775,577	\$775,577
811310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,852,870	\$4,852,870
Total	\$29,334,264	\$11,348,547	\$23,492,506	\$13,186,851	\$77,362,168	\$71,462,923	\$148,825,091	\$1,084,263,833	\$1,233,088,925

Source: CHA analysis of City of Charlotte data

Table 4-6: Percentage Distribution of Contract Dollars by Race and Gender

(share of total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
236115	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
236210	5.2%	0.0%	0.0%	0.0%	5.2%	13.8%	18.9%	81.1%	100.0%
236220	1.6%	0.0%	0.0%	0.0%	1.6%	0.4%	2.0%	98.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
237110	0.0%	0.3%	0.0%	3.1%	3.4%	10.5%	14.0%	86.0%	100.0%
237120	0.0%	0.0%	0.0%	0.0%	0.0%	83.4%	83.4%	16.6%	100.0%
237130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237310	0.4%	1.3%	0.4%	0.0%	2.1%	6.5%	8.5%	91.5%	100.0%
237990	0.0%	0.0%	23.7%	0.9%	24.6%	0.0%	24.6%	75.4%	100.0%
238110	1.2%	0.0%	0.0%	0.0%	1.2%	2.2%	3.4%	96.6%	100.0%
238120	0.0%	49.8%	0.0%	0.0%	49.8%	0.0%	49.8%	50.2%	100.0%
238130	0.0%	99.7%	0.0%	0.0%	99.7%	0.0%	99.7%	0.3%	100.0%
238140	0.0%	0.0%	0.0%	0.0%	0.0%	55.8%	55.8%	44.2%	100.0%
238150	20.2%	0.0%	0.0%	53.4%	73.6%	20.7%	94.3%	5.7%	100.0%
238160	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238190	0.0%	2.3%	0.0%	0.0%	2.3%	0.0%	2.3%	97.7%	100.0%
238210	8.0%	6.1%	0.0%	0.0%	14.1%	10.7%	24.8%	75.2%	100.0%
238220	2.2%	0.0%	0.0%	0.7%	2.9%	7.6%	10.5%	89.5%	100.0%
238290	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238310	54.4%	0.0%	0.0%	0.0%	54.4%	0.0%	54.4%	45.6%	100.0%
238320	5.0%	31.2%	0.0%	0.0%	36.2%	7.4%	43.6%	56.4%	100.0%
238330	9.2%	0.0%	0.0%	0.0%	9.2%	27.9%	37.1%	62.9%	100.0%
238340	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238350	2.4%	0.0%	0.0%	9.9%	12.3%	81.5%	93.9%	6.1%	100.0%
238390	0.0%	12.1%	0.0%	0.0%	12.1%	8.1%	20.2%	79.8%	100.0%
238910	1.2%	0.0%	0.0%	8.0%	9.2%	3.4%	12.7%	87.3%	100.0%
238990	1.2%	0.1%	0.0%	5.1%	6.4%	22.2%	28.6%	71.4%	100.0%
315210	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
323111	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
335910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
336350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423120	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
423210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423390	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423440	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	8.9%	91.1%	100.0%
423450	0.0%	0.0%	36.9%	0.0%	36.9%	0.0%	36.9%	63.1%	100.0%
423510	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423610	0.0%	0.0%	0.0%	0.0%	0.0%	45.3%	45.3%	54.7%	100.0%
423690	9.1%	0.0%	0.0%	0.0%	9.1%	90.9%	100.0%	0.0%	100.0%
423720	0.0%	0.0%	0.0%	0.0%	0.0%	87.3%	87.3%	12.7%	100.0%
423730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423810	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423830	0.0%	0.0%	17.5%	0.0%	17.5%	0.0%	17.5%	82.5%	100.0%
423850	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423990	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	97.9%	100.0%
424130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424590	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424690	0.0%	0.0%	0.0%	0.0%	0.0%	40.2%	40.2%	59.8%	100.0%
424710	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
441110	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	3.5%	96.5%	100.0%
441228	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
441310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
444130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
444190	0.0%	5.4%	0.0%	0.0%	5.4%	93.6%	99.1%	0.9%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
446110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
481219	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
484110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
484220	61.9%	6.2%	0.2%	4.9%	73.3%	18.0%	91.3%	8.7%	100.0%
488119	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
488410	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
488490	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	99.0%	100.0%
512110	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	8.8%	91.2%	100.0%
512191	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
517311	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
517911	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
524114	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
531210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
531320	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%	97.5%	100.0%
532112	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
532310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
532412	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541110	21.9%	0.0%	0.0%	0.0%	21.9%	0.0%	21.9%	78.1%	100.0%
541211	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541310	4.0%	6.1%	0.0%	0.0%	10.0%	0.0%	10.0%	90.0%	100.0%
541320	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.8%	99.2%	100.0%
541330	0.7%	0.1%	0.1%	0.8%	1.5%	0.5%	2.1%	97.9%	100.0%
541350	48.3%	0.0%	0.0%	0.0%	48.3%	0.0%	48.3%	51.7%	100.0%
541370	0.0%	0.3%	0.6%	0.0%	0.9%	37.8%	38.7%	61.3%	100.0%
541380	11.8%	0.0%	0.0%	0.0%	11.8%	1.7%	13.5%	86.5%	100.0%
541420	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541430	0.0%	0.0%	10.9%	0.0%	10.9%	89.1%	100.0%	0.0%	100.0%
541490	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541511	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
541512	0.0%	30.1%	0.0%	0.0%	30.1%	32.5%	62.5%	37.5%	100.0%
541519	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541611	9.9%	0.0%	0.0%	0.0%	9.9%	1.0%	10.9%	89.1%	100.0%
541612	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541613	0.0%	0.0%	0.0%	0.0%	0.0%	39.0%	39.0%	61.0%	100.0%
541614	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541618	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541620	0.0%	3.7%	0.0%	0.0%	3.7%	6.0%	9.8%	90.2%	100.0%
541690	0.0%	0.0%	0.0%	0.0%	0.0%	33.7%	33.7%	66.3%	100.0%
541810	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541820	3.2%	0.0%	0.0%	0.0%	3.2%	29.0%	32.2%	67.8%	100.0%
541840	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541921	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541922	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541990	19.5%	0.6%	0.0%	0.0%	20.1%	6.1%	26.2%	73.8%	100.0%
561110	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	8.4%	91.6%	100.0%
561311	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561320	12.3%	0.0%	0.0%	0.0%	12.3%	53.6%	65.9%	34.1%	100.0%
561330	0.0%	0.0%	0.0%	0.0%	0.0%	58.6%	58.6%	41.4%	100.0%
561421	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561440	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561612	1.5%	0.0%	0.0%	0.0%	1.5%	8.6%	10.1%	89.9%	100.0%
561621	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561710	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561720	29.6%	0.0%	0.0%	0.0%	29.6%	70.1%	99.7%	0.3%	100.0%
561730	20.9%	0.9%	0.0%	5.3%	27.1%	30.3%	57.3%	42.7%	100.0%
561790	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
561920	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561990	54.5%	0.0%	1.4%	0.1%	55.9%	6.9%	62.8%	37.2%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
562111	10.3%	0.0%	0.0%	24.4%	34.7%	8.3%	43.0%	57.0%	100.0%
562112	99.4%	0.0%	0.0%	0.0%	99.4%	0.6%	100.0%	0.0%	100.0%
562212	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
562910	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	7.9%	92.1%	100.0%
562991	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
562998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
611430	48.4%	0.0%	0.0%	0.0%	48.4%	28.4%	76.9%	23.1%	100.0%
621910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
722320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811111	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811121	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811192	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811213	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	2.4%	0.9%	1.9%	1.1%	6.3%	5.8%	12.1%	87.9%	100.0%
Total	2.4%	0.9%	1.9%	1.1%	6.3%	5.8%	12.1%	87.9%	100.0%

Source: CHA analysis of City of Charlotte data

D. The Availability of M/WBEs in the City's Geographic and Product Market

1. The Methodological Framework

Estimates of the availability of M/WBEs in the City's geographic and product market are a critical component of the City's compliance with its constitutional obligations to ensure its program is narrowly tailored. As discussed in Chapter II, the courts require that the availability estimates reflect the number of "ready, willing and able" firms that can perform on specific types of work involved in the recipient's prime contracts and associated subcontracts; general population is legally irrelevant. To examine whether M/WBEs are receiving full opportunities on City contracts, these narrowly tailored availability estimates were compared to the utilization percentage of dollars received by M/ WBEs. Availability estimates are also crucial for the City to determine its annual HUB target and to set narrowly tailored contract goals. We applied the "custom census" approach, with refinements, to estimating availability, discussed in Chapter II. Using this framework, CHA utilized three databases to estimate availability:

- 1. The Final Contract Data File.
- 2. The Master M/WB/DE Directory compiled by CHA.
- 3. Dun & Bradstreet/Hoovers Database.

First, we eliminated any duplicate entries in the geographically constrained FCDF. Some firms received multiple contracts for work performed in the same NAICS codes. Without this elimination of duplicate listings, the availability database would be artificially large. This list of unique firms comprised the first component of the Study's availability determination.

To develop the Master Directory, we utilized the North Carolina Unified Certification Program Directory, the City of Charlotte Certified Directory, and the City Contract Data File to compile the Master Directory. We limited the firms we used in our analysis to those operating within the City's product market.

We next developed a custom database from Hoovers, a Dun & Bradstreet company, for minority- and woman-owned firms and non-M/WBEs. Hoovers maintains a comprehensive, extensive and regularly updated listing of all firms conducting business. The database includes a vast amount of information on each firm, including location and detailed industry codes, and is the broadest publicly available data source for firm information. We purchased the information from Hoovers for the firms in the NAICS codes located in the City's market area in order to form our custom Dun & Bradstreet/Hoovers Database. In the initial download, the data from Hoovers simply identified a firm as being minority-owned.¹⁸⁸ However, the company does keep detailed information on ethnicity (*i.e.*, is the minority firm owner Black, Hispanic, Asian, or Native American). We obtained this additional information from Hoovers by special request.

The Hoovers database is the most comprehensive list of minority-owned and woman-owned businesses available. It is developed from the efforts of a national firm whose business is collecting business information. Hoovers builds its database from over 250 sources, including information from government sources and various associations, and its own efforts. Hoovers conducts an audit of the preliminary database prior to the public release of the data. That audit must result in a minimum of 94% accuracy. Once published, Hoovers has an established protocol to regularly refresh its data. This protocol involves updating any third-party lists that were used and contacting a selection of firms via Hoover's own call centers.

^{188.} The variable is labeled: "Is Minority Owned" and values for the variable can be either "1" (for yes) or blank.

We merged these three databases to form an accurate estimate of firms available to work on the City contracts. For an extended explanation of how unweighted and weighted availability are calculated, please see Appendix D.

2. The Availability Data and Results

Tables 4-7 through 4-9 present data on:

- 1. The unweighted availability percentages by race and gender and by NAICS codes for the City's product market;
- 2. The weights used to adjust the unweighted numbers;¹⁸⁹ and
- 3. The final estimates of the weighted averages of the individual six-digit level NAICS availability estimates in the City's market area.

We "weighted" the availability data for two reasons. First, the weighted availability represents the share of total possible contractors for each demographic group, weighted by the distribution of contract dollars across the NAICS codes in which the City spends its dollars. Weighting is necessary because the disparity ratio, discussed below, must be an "apples-to-apples" comparison. The numerator – the utilization rate – is measured in dollars *not* the number of firms. Therefore, the denominator – availability – must be measured in dollars, not the number of firms.

Second, weighting also reflects the importance of the availability of a demographic group in a particular NAICS code, that is, how important that NAICS code is to the City's contracting patterns. For example, in a hypothetical NAICS Code 123456, the total available firms are 100 and 60 of these firms are M/ WBEs; hence, M/WBE availability would be 60%. However, if the City spends only one percent of its contract dollars in this NAICS code, then this high availability would be offset by the low level of spending in that NAICS code. In contrast, if the City spent 25% of its contract dollars in NAICS Code 123456, then the same availability would carry a greater weight.

To calculate the weighted availability for each NAICS code, we first determined the unweighted availability for each demographic group in each NAICS code (presented in Table 4-7). In the previous example, the unweighted availability for M/WBEs in NAICS Code 123456 is 60%. We then multiplied the unweighted availability by the share of the City spending in that NAICS code presented in Table 4-8. This share is the *weight*. Using the previous example, where the City spending in NAICS Code 123456 was one percent, the component of M/WBE weighted availability for NAICS Code 123456 would be 0.006: 60% multiplied by one percent.

^{189.} These weights are equivalent to the share of contract dollars presented in the previous section.

We performed this calculation for each NAICS code and then summed all of the individual components for each demographic group to determine the weighted availability for that group. The results of this calculation are presented in Table 4-9.

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total	
236115	0.8%	0.3%	0.1%	0.2%	1.3%	1.7%	3.0%	97.0%	100.0%	
236210	4.8%	0.5%	0.4%	0.5%	6.2%	10.6%	16.8%	83.2%	100.0%	
236220	6.9%	1.5%	0.7%	1.6%	10.7%	7.2%	18.0%	82.0%	100.0%	
237110	3.1%	1.2%	0.3%	1.2%	5.7%	8.9%	14.6%	85.4%	100.0%	
237120	12.0%	0.0%	0.0%	4.3%	16.2%	5.1%	21.4%	78.6%	100.0%	
237130	0.7%	3.4%	0.0%	0.0%	4.1%	6.8%	10.8%	89.2%	100.0%	
237310	5.1%	1.5%	0.3%	0.8%	7.7%	9.5%	17.2%	82.8%	100.0%	
237990	1.7%	1.2%	0.9%	1.4%	5.2%	9.5%	14.7%	85.3%	100.0%	
238110	2.2%	2.4%	0.2%	0.2%	4.9%	3.1%	8.1%	91.9%	100.0%	
238120	2.0%	9.3%	0.7%	2.0%	13.9%	10.6%	24.5%	75.5%	100.0%	
238130	0.4%	0.2%	0.2%	0.1%	0.9%	2.2%	3.1%	96.9%	100.0%	
238140	2.8%	1.3%	0.2%	0.3%	4.6%	2.5%	7.1%	92.9%	100.0%	
238150	1.0%	1.0%	0.0%	1.7%	3.8%	8.4%	12.2%	87.8%	100.0%	
238160	0.6%	0.3%	0.1%	0.2%	1.3%	2.9%	4.2%	95.8%	100.0%	
238170	0.0%	0.2%	0.3%	0.0%	0.5%	3.8%	4.3%	95.7%	100.0%	
238190	7.2%	5.4%	0.9%	1.8%	15.3%	7.2%	22.5%	77.5%	100.0%	
238210	2.1%	0.6%	0.2%	0.5%	3.4%	4.3%	7.7%	92.3%	100.0%	
238220	1.1%	0.2%	0.1%	0.2%	1.7%	2.7%	4.4%	95.6%	100.0%	
238290	1.9%	0.0%	0.0%	0.5%	2.3%	5.6%	7.9%	92.1%	100.0%	
238310	1.4%	1.4%	0.2%	0.6%	3.5%	3.7%	7.3%	92.7%	100.0%	
238320	1.5%	0.7%	0.1%	0.1%	2.4%	2.4%	4.8%	95.2%	100.0%	
238330	2.7%	0.3%	0.2%	0.0%	3.3%	4.6%	7.9%	92.1%	100.0%	
238340	0.7%	0.6%	0.3%	0.1%	1.7%	3.2%	4.9%	95.1%	100.0%	
238350	0.9%	0.6%	0.2%	0.3%	2.0%	2.7%	4.7%	95.3%	100.0%	
238390	1.2%	0.6%	0.2%	0.0%	2.0%	2.0%	4.0%	96.0%	100.0%	
238910	5.4%	0.4%	0.4%	1.4%	7.6%	11.4%	19.0%	81.0%	100.0%	

Table 4-7: Unweighted M/WBE Availability for the City Contracts

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
238990	1.5%	0.8%	0.1%	0.2%	2.6%	3.3%	5.9%	94.1%	100.0%
315210	0.0%	0.0%	4.8%	0.0%	4.8%	4.8%	9.5%	90.5%	100.0%
323111	1.2%	0.3%	0.3%	0.3%	2.1%	7.6%	9.7%	90.3%	100.0%
335910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
336350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423110	0.4%	0.0%	0.0%	0.0%	0.4%	2.8%	3.3%	96.7%	100.0%
423120	0.5%	0.0%	0.1%	0.1%	0.8%	3.1%	3.9%	96.1%	100.0%
423210	1.1%	0.0%	0.4%	0.4%	1.9%	6.2%	8.2%	91.8%	100.0%
423320	0.0%	0.4%	0.0%	0.0%	0.4%	4.1%	4.6%	95.4%	100.0%
423390	2.9%	0.0%	0.8%	0.0%	3.8%	11.8%	15.5%	84.5%	100.0%
423440	0.2%	0.1%	0.1%	0.0%	0.4%	2.6%	3.0%	97.0%	100.0%
423450	3.8%	1.0%	1.3%	0.3%	6.4%	7.4%	13.8%	86.2%	100.0%
423510	0.8%	0.3%	0.0%	0.3%	1.3%	5.3%	6.5%	93.5%	100.0%
423610	0.9%	0.4%	0.3%	0.2%	1.8%	5.3%	7.1%	92.9%	100.0%
423690	1.2%	0.6%	1.0%	0.2%	3.0%	6.5%	9.5%	90.5%	100.0%
423720	2.5%	0.0%	0.5%	0.0%	3.1%	9.7%	12.7%	87.3%	100.0%
423730	0.7%	0.4%	0.0%	0.0%	1.1%	3.6%	4.6%	95.4%	100.0%
423810	2.0%	1.0%	0.0%	0.0%	3.0%	5.3%	8.3%	91.7%	100.0%
423830	0.2%	0.3%	0.2%	0.0%	0.6%	4.0%	4.7%	95.3%	100.0%
423850	1.1%	0.1%	0.1%	0.2%	1.6%	12.1%	13.7%	86.3%	100.0%
423910	0.9%	0.2%	0.0%	0.0%	1.1%	3.2%	4.3%	95.7%	100.0%
423990	0.6%	0.2%	0.1%	0.0%	0.9%	4.0%	4.9%	95.1%	100.0%
424130	0.5%	0.0%	0.5%	0.5%	1.6%	3.1%	4.7%	95.3%	100.0%
424210	3.7%	0.4%	0.4%	0.0%	4.5%	7.4%	11.9%	88.1%	100.0%
424320	1.4%	1.4%	0.0%	0.0%	2.9%	7.2%	10.1%	89.9%	100.0%
424330	2.4%	0.5%	0.0%	0.5%	3.3%	13.7%	17.1%	82.9%	100.0%
424590	0.0%	0.0%	0.4%	0.4%	0.9%	4.7%	5.5%	94.5%	100.0%
424690	1.6%	0.4%	0.9%	0.2%	3.1%	4.0%	7.2%	92.8%	100.0%
424710	1.2%	0.0%	0.0%	0.0%	1.2%	4.7%	5.8%	94.2%	100.0%
424720	1.2%	0.0%	0.0%	0.0%	1.2%	5.4%	6.7%	93.3%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
424910	0.2%	0.0%	0.0%	0.2%	0.4%	4.7%	5.1%	94.9%	100.0%
424990	0.3%	0.1%	0.1%	0.0%	0.5%	2.8%	3.2%	96.8%	100.0%
441110	0.8%	0.0%	0.0%	0.1%	0.8%	1.3%	2.2%	97.8%	100.0%
441228	0.1%	0.0%	0.0%	0.0%	0.1%	1.3%	1.4%	98.6%	100.0%
441310	0.0%	0.1%	0.0%	0.0%	0.1%	2.5%	2.7%	97.3%	100.0%
444130	0.0%	0.1%	0.1%	0.1%	0.4%	5.0%	5.4%	94.6%	100.0%
444190	0.6%	0.7%	0.1%	0.2%	1.6%	5.9%	7.5%	92.5%	100.0%
446110	0.3%	0.0%	0.1%	0.1%	0.6%	2.8%	3.4%	96.6%	100.0%
481219	9.4%	0.0%	0.0%	0.0%	9.4%	1.2%	10.6%	89.4%	100.0%
484110	4.2%	0.3%	0.1%	0.1%	4.7%	3.1%	7.7%	92.3%	100.0%
484220	33.0%	3.3%	0.9%	1.2%	38.3%	13.0%	51.3%	48.7%	100.0%
488119	0.1%	0.0%	0.1%	0.1%	0.3%	0.8%	1.1%	98.9%	100.0%
488410	1.0%	0.1%	0.0%	0.0%	1.0%	3.7%	4.7%	95.3%	100.0%
488490	13.3%	0.4%	0.0%	0.4%	14.2%	10.8%	25.0%	75.0%	100.0%
512110	2.9%	0.7%	0.3%	0.3%	4.3%	7.7%	12.0%	88.0%	100.0%
512191	1.5%	0.0%	0.0%	0.4%	1.9%	4.2%	6.0%	94.0%	100.0%
517311	0.8%	0.8%	0.4%	0.0%	2.0%	5.2%	7.2%	92.8%	100.0%
517911	1.0%	0.7%	0.2%	0.2%	2.0%	3.1%	5.1%	94.9%	100.0%
518210	2.3%	0.4%	0.7%	0.7%	4.2%	8.4%	12.6%	87.4%	100.0%
524114	0.0%	0.0%	0.0%	0.7%	0.7%	7.3%	7.9%	92.1%	100.0%
531210	0.7%	0.0%	0.1%	0.0%	0.8%	4.8%	5.6%	94.4%	100.0%
531320	1.0%	0.1%	0.0%	0.0%	1.1%	9.2%	10.3%	89.7%	100.0%
532112	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	94.1%	100.0%
532310	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	2.7%	97.3%	100.0%
532412	1.0%	0.0%	0.0%	0.5%	1.5%	8.7%	10.2%	89.8%	100.0%
541110	0.6%	0.0%	0.0%	0.0%	0.7%	5.5%	6.2%	93.8%	100.0%
541211	0.9%	0.1%	0.1%	0.0%	1.1%	9.7%	10.8%	89.2%	100.0%
541310	2.1%	1.7%	0.6%	0.2%	4.6%	7.1%	11.7%	88.3%	100.0%
541320	1.2%	0.2%	0.2%	0.1%	1.6%	2.8%	4.4%	95.6%	100.0%
541330	3.6%	1.2%	1.2%	0.9%	6.8%	5.6%	12.4%	87.6%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
541350	2.8%	0.6%	0.4%	0.4%	4.1%	3.1%	7.2%	92.8%	100.0%
541370	1.2%	0.9%	1.2%	0.7%	4.1%	5.0%	9.1%	90.9%	100.0%
541380	1.1%	0.2%	0.6%	0.6%	2.5%	4.9%	7.4%	92.6%	100.0%
541420	6.8%	1.7%	0.0%	1.7%	10.2%	20.3%	30.5%	69.5%	100.0%
541430	2.8%	0.3%	0.1%	0.2%	3.4%	14.9%	18.3%	81.7%	100.0%
541490	10.8%	0.9%	0.0%	0.0%	11.7%	24.3%	36.0%	64.0%	100.0%
541511	2.6%	0.3%	1.8%	0.3%	5.0%	4.0%	8.9%	91.1%	100.0%
541512	4.6%	0.7%	2.1%	0.6%	7.9%	5.9%	13.8%	86.2%	100.0%
541519	15.1%	1.1%	2.2%	1.7%	20.1%	5.0%	25.1%	74.9%	100.0%
541611	5.2%	0.4%	0.4%	0.3%	6.2%	7.7%	13.9%	86.1%	100.0%
541612	10.5%	1.3%	0.6%	0.4%	12.8%	17.2%	30.0%	70.0%	100.0%
541613	2.2%	0.2%	0.2%	0.1%	2.6%	4.4%	7.0%	93.0%	100.0%
541614	17.7%	0.4%	1.6%	0.4%	20.1%	10.0%	30.1%	69.9%	100.0%
541618	2.0%	0.2%	0.3%	0.1%	2.6%	3.7%	6.3%	93.7%	100.0%
541620	2.3%	0.5%	2.5%	0.7%	5.9%	11.5%	17.4%	82.6%	100.0%
541690	4.7%	1.4%	1.8%	0.3%	8.1%	9.1%	17.2%	82.8%	100.0%
541810	2.2%	0.5%	0.0%	0.1%	2.8%	14.6%	17.4%	82.6%	100.0%
541820	4.3%	0.5%	0.0%	0.0%	4.9%	12.9%	17.8%	82.2%	100.0%
541840	8.1%	0.0%	0.0%	0.9%	9.0%	7.2%	16.2%	83.8%	100.0%
541910	4.7%	0.0%	0.3%	0.0%	5.1%	10.3%	15.3%	84.7%	100.0%
541921	0.5%	0.1%	0.0%	0.0%	0.6%	5.9%	6.4%	93.6%	100.0%
541922	1.8%	0.4%	0.1%	0.1%	2.5%	6.4%	8.9%	91.1%	100.0%
541990	1.0%	0.1%	0.2%	0.0%	1.4%	4.6%	6.0%	94.0%	100.0%
561110	1.5%	0.1%	0.2%	0.1%	1.9%	2.2%	4.1%	95.9%	100.0%
561311	4.2%	0.5%	0.7%	0.3%	5.7%	6.8%	12.5%	87.5%	100.0%
561320	3.7%	0.0%	0.9%	0.4%	5.1%	11.5%	16.5%	83.5%	100.0%
561330	21.1%	0.0%	5.3%	0.0%	26.3%	10.5%	36.8%	63.2%	100.0%
561421	1.6%	0.3%	0.0%	0.0%	2.0%	6.2%	8.1%	91.9%	100.0%
561440	2.9%	0.0%	0.0%	0.0%	2.9%	3.5%	6.4%	93.6%	100.0%
561612	6.1%	0.2%	0.4%	0.6%	7.3%	4.2%	11.5%	88.5%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
561621	3.1%	0.4%	0.6%	0.4%	4.6%	3.6%	8.2%	91.8%	100.0%
561710	0.5%	0.4%	0.0%	0.1%	0.9%	3.7%	4.6%	95.4%	100.0%
561720	7.0%	0.3%	0.4%	0.1%	7.8%	7.8%	15.6%	84.4%	100.0%
561730	2.0%	0.3%	0.1%	0.2%	2.6%	2.9%	5.5%	94.5%	100.0%
561790	3.1%	0.3%	0.0%	0.1%	3.5%	4.2%	7.7%	92.3%	100.0%
561920	6.6%	0.0%	0.0%	0.0%	6.6%	13.2%	19.7%	80.3%	100.0%
561990	2.8%	0.2%	0.2%	0.2%	3.3%	4.1%	7.4%	92.6%	100.0%
562111	14.8%	1.9%	0.0%	1.9%	18.5%	3.7%	22.2%	77.8%	100.0%
562112	35.7%	0.0%	7.1%	21.4%	64.3%	7.1%	71.4%	28.6%	100.0%
562212	0.3%	0.3%	0.0%	0.0%	0.6%	2.8%	3.4%	96.6%	100.0%
562910	8.3%	1.7%	1.7%	3.3%	14.9%	10.7%	25.6%	74.4%	100.0%
562991	0.9%	0.0%	0.0%	0.6%	1.5%	5.2%	6.7%	93.3%	100.0%
562998	2.5%	0.0%	2.5%	5.0%	10.0%	10.0%	20.0%	80.0%	100.0%
611430	38.2%	10.9%	0.0%	0.0%	49.1%	23.6%	72.7%	27.3%	100.0%
621910	4.1%	0.0%	0.0%	0.0%	4.1%	3.7%	7.7%	92.3%	100.0%
722320	3.3%	0.1%	0.0%	0.0%	3.3%	8.9%	12.2%	87.8%	100.0%
811111	0.3%	0.0%	0.0%	0.0%	0.5%	1.6%	2.0%	98.0%	100.0%
811121	0.5%	0.2%	0.1%	0.1%	0.8%	2.5%	3.3%	96.7%	100.0%
811192	1.9%	0.1%	0.0%	0.0%	2.0%	1.8%	3.8%	96.2%	100.0%
811213	0.0%	1.3%	0.0%	0.0%	1.3%	6.7%	8.0%	92.0%	100.0%
811310	0.3%	0.5%	0.1%	0.1%	0.9%	3.0%	3.9%	96.1%	100.0%
Total	2.0%	0.3%	0.2%	0.2%	2.8%	4.3%	7.1%	92.9%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table 4-8: Distribution of the City Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
236115	New Single-Family Housing Construction (except For-Sale Builders)	0.004%
236210	Industrial Building Construction	3.5%
236220	Commercial and Institutional Building Construction	3.4%
237110	Water and Sewer Line and Related Structures Construction	15.1%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
237120	Oil and Gas Pipeline and Related Structures Construction	0.1%
237130	Power and Communication Line and Related Structures Construction	0.0005%
237310	Highway, Street, and Bridge Construction	20.2%
237990	Other Heavy and Civil Engineering Construction	5.2%
238110	Poured Concrete Foundation and Structure Contractors	1.9%
238120	Structural Steel and Precast Concrete Contractors	0.5%
238130	Framing Contractors	0.02%
238140	Masonry Contractors	0.1%
238150	Glass and Glazing Contractors	0.1%
238160	Roofing Contractors	0.1%
238170	Siding Contractors	0.001%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.1%
238210	Electrical Contractors and Other Wiring Installation Contractors	2.8%
238220	Plumbing, Heating, and Air-Conditioning Contractors	1.2%
238290	Other Building Equipment Contractors	0.8%
238310	Drywall and Insulation Contractors	0.03%
238320	Painting and Wall Covering Contractors	0.1%
238330	Flooring Contractors	0.1%
238340	Tile and Terrazzo Contractors	0.02%
238350	Finish Carpentry Contractors	0.02%
238390	Other Building Finishing Contractors	0.2%
238910	Site Preparation Contractors	3.5%
238990	All Other Specialty Trade Contractors	0.7%
315210	Cut and Sew Apparel Contractors	0.02%
323111	Commercial Printing (except Screen and Books)	0.05%
335910	Battery Manufacturing	0.01%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	0.03%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	0.7%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	0.9%
423210	Furniture Merchant Wholesalers	0.004%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.1%
423390	Other Construction Material Merchant Wholesalers	0.01%
423440	Other Commercial Equipment Merchant Wholesalers	0.003%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.02%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	0.1%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.1%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.03%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0.2%
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	0.005%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.01%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.3%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.1%
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	0.02%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	0.1%
424130	Industrial and Personal Service Paper Merchant Wholesalers	0.04%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.01%
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	0.005%
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	0.02%
424590	Other Farm Product Raw Material Merchant Wholesalers	0.02%
424690	Other Chemical and Allied Products Merchant Wholesalers	0.01%
424710	Petroleum Bulk Stations and Terminals	0.3%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	0.01%
424910	Farm Supplies Merchant Wholesalers	0.02%
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0.005%
441110	New Car Dealers	1.4%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	0.2%
441310	Automotive Parts and Accessories Stores	0.05%
444130	Hardware Stores	0.01%
444190	Other Building Material Dealers	0.2%
446110	Pharmacies and Drug Stores	5.0%
481219	Other Nonscheduled Air Transportation	5.1%
484110	General Freight Trucking, Local	0.02%
484220	Specialized Freight (except Used Goods) Trucking, Local	1.5%
488119	Other Airport Operations	0.1%
488410	Motor Vehicle Towing	0.01%
488490	Other Support Activities for Road Transportation	0.04%
512110	Motion Picture and Video Production	0.01%
512191	Teleproduction and Other Postproduction Services	0.001%
517311	Wired Telecommunications Carriers	0.00005%
517911	Telecommunications Resellers	0.03%
518210	Data Processing, Hosting, and Related Services	0.001%
524114	Direct Health and Medical Insurance Carriers	11.0%
531210	Offices of Real Estate Agents and Brokers	0.02%
531320	Offices of Real Estate Appraisers	0.03%
532112	Passenger Car Leasing	0.01%
532310	General Rental Centers	0.002%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0.04%
541110	Offices of Lawyers	0.04%
541211	Offices of Certified Public Accountants	0.002%
541310	Architectural Services	0.4%
541320	Landscape Architectural Services	0.3%
541330	Engineering Services	5.8%
541350	Building Inspection Services	0.1%
541370	Surveying and Mapping (except Geophysical) Services	0.5%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
541380	Testing Laboratories	0.4%
541420	Industrial Design Services	0.001%
541430	Graphic Design Services	0.02%
541490	Other Specialized Design Services	0.001%
541511	Custom Computer Programming Services	0.1%
541512	Computer Systems Design Services	0.01%
541519	Other Computer Related Services	0.5%
541611	Administrative Management and General Management Consulting Services	0.4%
541612	Human Resources Consulting Services	0.01%
541613	Marketing Consulting Services	0.02%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.004%
541618	Other Management Consulting Services	0.0002%
541620	Environmental Consulting Services	0.2%
541690	Other Scientific and Technical Consulting Services	0.001%
541810	Advertising Agencies	0.02%
541820	Public Relations Agencies	0.1%
541840	Media Representatives	0.004%
541910	Marketing Research and Public Opinion Polling	0.01%
541921	Photography Studios, Portrait	0.0002%
541922	Commercial Photography	0.0005%
541990	All Other Professional, Scientific, and Technical Services	0.1%
561110	Office Administrative Services	0.1%
561311	Employment Placement Agencies	0.01%
561320	Temporary Help Services	0.01%
561330	Professional Employer Organizations	0.01%
561421	Telephone Answering Services	0.01%
561440	Collection Agencies	0.0003%
561612	Security Guards and Patrol Services	0.2%
561621	Security Systems Services (except Locksmiths)	0.1%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
561710	Exterminating and Pest Control Services	0.02%
561720	Janitorial Services	0.1%
561730	Landscaping Services	1.0%
561790	Other Services to Buildings and Dwellings	0.1%
561920	Convention and Trade Show Organizers	0.01%
561990	All Other Support Services	0.2%
562111	Solid Waste Collection	0.03%
562112	Hazardous Waste Collection	0.03%
562212	Solid Waste Landfill	0.02%
562910	Remediation Services	0.2%
562991	Septic Tank and Related Services	0.03%
562998	All Other Miscellaneous Waste Management Services	0.4%
611430	Professional and Management Development Training	0.02%
621910	Ambulance Services	0.2%
722320	Caterers	0.01%
811111	General Automotive Repair	0.1%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	0.04%
811192	Car Washes	0.02%
811213	Communication Equipment Repair and Maintenance	0.1%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.4%
TOTAL		100.0%

Source: CHA analysis of City of Charlotte data

Table 4-9 presents the weighted availability results for each of the racial and gender categories. The aggregated availability of M/WBEs, weighted by the City's spending in its geographic and industry markets, is 13.1% for the City's contracts. This overall, weighted M/WBE availability result can be used by the City to determine its overall, annual aspirational HUB goal.

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
3.8%	0.9%	0.4%	0.8%	5.9%	7.2%	13.1%	86.9%	100.0%

Table 4-9: Aggregated Weighted Availability for City Contracts

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

E. Analysis of the Concentration of Contract Dollars among Firms

In addition to examining the level of M/WBE and non-M/WBE contract dollar utilization, another important dimension to a disparity analysis is the level of contract dollars concentration among M/WBE and non-M/WBE firms. This approach is important because the success of a group in receiving contract dollars may be caused by an unusual amount of dollars concentrated among a few firms. If that is the case, then a race- or gender-based remedial program may still be supportable even though a few firms have been able to overcome discriminatory barriers. This section presents data to examine this issue.

Prior to presenting these data, it is important to emphasize two important findings: 1) the three NAICS codes that provide the most contract dollars to each M/ WBE group capture a larger share of the overall City spending received by the group than the share of overall City spending captured by the top three NAICS codes for the City; and 2) the three NAICS codes that provide the most contract dollars to M/WBEs are different from the three NAICS codes that provide non-M/ WBE firms their largest share of contract dollars.

With respect to the first finding, Table 4-10 presents data on the share of the City contract dollars received by the top three NAICS codes for each demographic group. These shares are derived from the data presented in Tables 4-5 and 4-6. The three NAICS codes where the City spent most of its contract dollars capture 46.3% of all City spending. However, for each M/WBE group, the corresponding figure for the share of spending captured by the top three codes is approximately half of this: ranging between 94.9% (Asian) and 56.7% (Black).

Demographic Group	Share of All the City Spending in the Top Three NAICS Codes for Each Group
All	46.3%
Black	56.7%
Hispanic	71.9%
Asian	94.9%
Native American	77.5%
White Woman	58.3%
Non-M/WBE	48.3%

Table 4-10: Comparison of the Share of the City Spending Captured by the Top Three NAICSCodes for Each Demographic Group

Source: CHA analysis of City of Charlotte data

With respect to the second finding, Table 4-11 provides more detail on the data presented in Table 4-10. Table 4-11 lists the top three codes for each group and their corresponding share of the group's total spending. The code with the largest amount of City spending – NAICS code 237310 (Highway, Street, and Bridge Construction) – is among the top three codes for Hispanics and White women. The code with the second largest amount of City spending – NAICS code 237110 (Water and Sewer Line and Related Structures Construction) – is among the top three codes only for Native Americans and White women. The code with the third largest amount of City spending – NAICS code 524114 (Direct Health and Medical Insurance Carriers) – is not among the top three codes for any group. We can conclude that the NAICS codes that are important to the City overall are different from the codes that are important to M/WBEs.

NAICS	NAICS Code Label	WEIGHT	Total of Top 3 Codes
	All	<u> </u>	
237310	Highway, Street, and Bridge Construction	20.2%	
237110	Water and Sewer Line and Related Structures Construction	15.1%	46.3%
524114	Direct Health and Medical Insurance Carriers	11.0%	
	Black		
484220	Specialized Freight (except Used Goods) Trucking, Local	38.7%	
238210	Electrical Contractors and Other Wiring Installation Contractors	9.6%	56.7%
561730	Landscaping Services	8.4%	
	Hispanic		
237310	Highway, Street, and Bridge Construction	27.7%	
238120	Structural Steel and Precast Concrete Contractors	25.5%	71.9%
238210	Electrical Contractors and Other Wiring Installation Contractors	18.7%	
	Asian		
237990	Other Heavy and Civil Engineering Construction	65.0%	
541519	Other Computer Related Services	25.4%	94.9%
237310	Highway, Street, and Bridge Construction	4.4%	
	Native American		
237110	Water and Sewer Line and Related Structures Construction	44.3%	
238910	Site Preparation Contractors	26.4%	77.5%
484220	Specialized Freight (except Used Goods) Trucking, Local	6.8%	
	White Woman		
237110	Water and Sewer Line and Related Structures Construction	27.3%	
237310	Highway, Street, and Bridge Construction	22.5%	58.3%
236210	Industrial Building Construction	8.4%	
	Non-M/WBE		
237310	Highway, Street, and Bridge Construction	21.1%	
237110	Water and Sewer Line and Related Structures Construction	14.7%	48.3%
524114	Direct Health and Medical Insurance Carriers	12.5%	

Table 4-11: The Top Three the City Spending NAICS Codes for Each Demographic Group

Tables 4-12 through 4-31 present more details on how City spending varies across groups and within groups. These results illustrate the different levels of concentration of contract dollars among M/WBEs compared to non-M/WBEs. For each demographic group, we re-state the three NAICS codes where the group receives the largest share of the City's spending (first presented in Table 4-11). We next present the share of all group contract dollars and compare that share to the corresponding share received by non-M/WBEs. Finally, we examine each of the NAICS codes individually to compare the concentration of contract dollars among the three largest firms for that group to the concentration of contract dollars among the three largest non-M/WBEs.

Tables 4-12 through 4-15 present data for Black-owned firms.

- Table 4-12 presents the three NAICS codes where Black firms received the largest share of their contract dollars. While these codes captured 56.7% of all Black contract dollars, the corresponding figure for non-M/WBEs was 3.0%. In particular, while the City only spent 1.5% of its dollars in NAICS code 484220, 38.7% of all Black contract dollars came from this code. This disproportionality was evident in the other two leading codes for Black firms: NAICS code 238210 contributed 9.6% to all Black contract dollars but just 2.8% to all the City spending; NAICS code 561730 contributed 8.4% to all Black contract dollars but just 1.0% to all the City spending.
- Table 4-13 presents data on the firm concentration in NAICS 484220. Here, the contract dollars received by Black firms were less concentrated than the contract dollars by non-M/WBE firms. The top three Black firms received 62.8% of all Black dollars; the top three non-M/WBE firms received 81.2% of non-M/WBE dollars.
- Table 4-14 presents data on the firm concentration in NAICS 238210. In this code, the contract dollars received by Black firms were more concentrated than the contract dollars by non-M/WBE firms. The top three Black firms received 86.2% of all Black dollars; the top three non-M/WBE firms received 61.7% of non-M/WBE dollars.
- Table 4-15 presents data on the firm concentration in NAICS 561730. In this code, the contract dollars received by Black firms were more concentrated than the contract dollars by non-M/WBE firms. The top three Black firms received 96.9% of all Black dollars; the top three non-M/WBE firms received just 50.5% of non-M/WBE dollars.

NAICS Code	NAICS Code Label	Weight	Share of Total Black Dollars	Share of Total Non-M/WBE Dollars
484220	Specialized Freight (except Used Goods) Trucking, Local	1.5%	38.7%	0.1%
238210	Electrical Contractors and Other Wiring Installation Contractors	2.8%	9.6%	2.4%
561730	Landscaping Services	1.0%	8.4%	0.5%
Total 3-co	de Share of Total Group Dollars	56.7%	3.0%	

Table 4-12: Three NAICS Codes where Black Firms Received the Most Spending

Source: CHA analysis of City of Charlotte data

Table 4-13: Comparison of Black and non-M/WBE Firm Concentration NAICS Code 484220: Specialized Freight (except Used Goods) Trucking, Local

	Black	Non-M/WBE
Number of Contracts	64	28
Number of Firms	15	12
Share of #1	33.9%	50.2%
Share of #2	16.2%	24.8%
Share of #3	12.7%	6.2%
Share of Top 3	62.8%	81.2%

Source: CHA analysis of City of Charlotte data

Table 4-14: Comparison of Black and non-M/WBE Firm ConcentrationNAICS Code 238210: Electrical Contractors and Other Wiring Installation Contractors

	Black	Non-M/WBE
Number of Contracts	8	30
Number of Firms	6	17
Share of #1	36.4%	28.4%
Share of #2	33.6%	21.9%
Share of #3	16.2%	11.3%
Share of Top 3	86.2%	61.7%

	Black	Non-M/WBE
Number of Contracts	12	33
Number of Firms	4	17
Share of #1	77.2%	17.8%
Share of #2	15.6%	16.8%
Share of #3	4.1%	15.9%
Share of Top 3	96.9%	50.5%

Table 4-15: Comparison of Black and non-M/WBE Firm Concentration NAICS Code 561730: Landscaping Services

Source: CHA analysis	of City of	Charlotte data
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Tables 4-16 through 4-19 present data for Hispanic-owned firms.

- Table 4-16 presents the three NAICS codes where Hispanic firms received the largest share of their contract dollars. While these codes comprised 71.9% of all Hispanic contract dollars, the corresponding figure for non-M/WBEs was 23.8%. In particular, while the City spent 20.2% of its dollars in NAICS code 237310, 27.7% of all Hispanic contract dollars came from this code. This disproportionality was even greater in the other two leading codes for Hispanic firms: NAICS code 238120 contributed 25.5% to all Hispanic contract dollars but only 0.5% of all City spending; NAICS code 238210 contributed 18.7% to all Hispanic contract dollars but only 2.8% to all the City spending.
- Table 4-17 presents data on the firm concentration in NAICS 237210. Here, the contract dollars received by Hispanic firms were more concentrated than the contract dollars by non-M/WBE firms. The top three Hispanics firms received 93.9% of all Hispanic dollars; the top three non-M/WBE firms received 69.6% of non-M/WBE dollars.
- Table 4-18 presents data on the firm concentration in NAICS 238120. Only one Hispanic firm received any contract dollars; six non-M/WBE firms received contracts and the leading firm received 90.2% of all non-M/WBE contract dollars.
- Table 4-19 presents data on the firm concentration in NAICS 238210. In this code, the contract dollars received by Hispanic firms were more concentrated than the contract dollars by non-M/WBE firms. Two Hispanics firms received all of the Hispanic dollars; the top three non-M/WBE firms received 61.7% of non-M/WBE dollars.

NAICS Code	NAICS Code Label	Weight	Share of Total Hispanic Dollars	Share of Total Non-M/WBE Dollars
237310	Highway, Street, and Bridge Construction	20.2%	27.7%	21.1%
238120	Structural Steel and Precast Concrete Contractors	0.5%	25.5%	0.3%
238210	Electrical Contractors and Other Wiring Installation Contractors	2.8%	18.7%	2.4%
Total 3-cod	le Share of Total Group Dollars		71.9%	23.8%

Table 4-16: Three NAICS Codes where Hispanic Firms Received the Most Spending

Source: CHA analysis of City of Charlotte data

Table 4-17: Comparison of Hispanic and Non-M/WBE Firm Concentration NAICS Code 237310: Highway, Street, and Bridge Construction

	Hispanic	Non-M/WBE
Number of Contracts	29	99
Number of Firms	8	45
Share of #1	79.9%	37.2%
Share of #2	10.1%	17.1%
Share of #3	4.0%	15.2%
Share of Top 3	93.9%	69.6%

Source: CHA analysis of City of Charlotte data

Table 4-18: Comparison of Hispanic and Non-M/WBE Firm ConcentrationNAICS Code 238120: Structural Steel and Precast Concrete Contractors

	Hispanic	Non-M/WBE
Number of Contracts	1	6
Number of Firms	1	6
Share of #1	100.0%	90.2%
Share of #2	0.0%	2.8%
Share of #3	0.0%	2.7%
Share of Top 3	100.0%	95.7%

	Hispanic	Non-M/WBE
Number of Contracts	4	30
Number of Firms	2	17
Share of #1	80.5%	28.4%
Share of #2	19.5%	21.9%
Share of #3	0.0%	11.3%
Share of Top 3	100.0%	61.7%

Table 4-19: Comparison of Hispanic and Non-M/WBE Firm Concentration NAICS Code 238210: Electrical Contractors and Other Wiring Installation Contractors

Source: CHA analysis	of City of	Charlotte data
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Tables 4-20 through 4-23 present data for Asian-owned firms.

- Table 4-20 presents the three NAICS codes where Asian firms received the largest share of their contract dollars. While these codes captured 94.9% of all Asian contract dollars, the corresponding figure for non-M/WBEs was 25.6%. In particular, while the City only spent 5.2% of its dollars in NAICS code 237990, 65.0% of all Asian contract dollars came from this code. Disproportionality was evident in the other two leading codes for Asian firms: NAICS code 541519 contributed 25.4% to all Asian contract dollars but just 0.5% to all the City spending; NAICS code 237310 contributed 4.4% to all Asian contract dollars and 20.2% to all City spending.
- Table 4-21 presents data on the firm concentration in NAICS 237990. Here, the contract dollars received by Asian firms were more concentrated than the contract dollars by non-M/WBE firms. Only one Asian firm received contract dollars; the top three non-M/WBE firms received 96.4% of non-M/WBE dollars.
- Table 4-22 presents data on the firm concentration in NAICS 541519. Just one Asian firm and no non-M/WBE firms received contracts in this code.
- Table 4-23 presents data on the firm concentration in NAICS 237310. In this code, the contract dollars received by Asian firms were more concentrated than the contract dollars by non-M/WBE firms. Two Asian firms received all Asian dollars; the top three non-M/WBE firms received 69.6% of non-M/WBE dollars.

NAICS Code	NAICS Code Label	Weight	Share of Total Asian Dollars	Share of Total Non-M/WBE Dollars
237990	Other Heavy and Civil Engineering Construction	5.2%	65.0%	4.5%
541519	Other Computer Related Services	0.5%	25.4%	0.0%
237310	Highway, Street, and Bridge Construction	20.2%	4.4%	21.1%
Total 3-cod	le Share of Total Group Dollars		94.9%	25.6%

Table 4-20: Three NAICS Codes where Asian Firms Received the Most Spending

Source: CHA analysis of City of Charlotte data

Table 4-21: Comparison of Asian and Non-M/WBE Firm Concentration NAICS Code 237990: Other Heavy and Civil Engineering Construction

	Asian	Non-M/WBE
Number of Contracts	1	14
Number of Firms	1	14
Share of #1	100.0%	84.4%
Share of #2	0.0%	8.2%
Share of #3	0.0%	3.8%
Share of Top 3	100.0%	96.4%

Source: CHA analysis of City of Charlotte data

Table 4-22: Comparison of Asian and Non-M/WBE Firm Concentration NAICS Code 541519: Other Computer Related Services

	Asian	Non-M/WBE
Number of Contracts	1	0
Number of Firms	1	0
Share of #1	100.0%	0.0%
Share of #2	0.0%	0.0%
Share of #3	0.0%	0.0%
Share of Top 3	100.0%	0.0%

	Asian	Non-M/WBE
Number of Contracts	3	99
Number of Firms	2	45
Share of #1	97.0%	37.2%
Share of #2	3.0%	17.1%
Share of #3	0.0%	15.2%
Share of Top 3	100.0%	69.6%

Table 4-23: Comparison of Asian and Non-M/WBE Firm Concentration NAICS Code 237310: Highway, Street, and Bridge Construction

Source: CHA analysis	of City of	Charlotte data
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Tables 4-24 through 4-27 present data for Native American-owned firms.

- Table 4-24 presents the three NAICS codes where Native American firms received the largest share of their contract dollars. While these codes captured 77.5% of all Native American contract dollars, the corresponding figure for non-M/WBEs was 18.4%. In particular, while the City only spent 15.1% of its dollars in NAICS code 237110, 44.3% of all Native American contract dollars came from this code. This disproportionality was evident in the other two leading Native American contract dollars but just 3.5% to all the City spending. NAICS code 484220 contributed 6.8% to all Native American contract dollars and 1.5% to all the City spending.
- Table 4-25 presents data on the firm concentration in NAICS 237110. Here, the contract dollars received by Native American firms were more concentrated than the contract dollars by non-M/WBE firms. Two Native American firms received all Native American dollars; the top three non-M/WBE firms received 47.1% of non-M/WBE dollars.
- Table 4-26 presents data on the firm concentration in NAICS 238910. Here, the contract dollars received by Native American firms were more concentrated than the contract dollars by non-M/WBE firms. One Native American firm received all Native American dollars; the top three non-M/WBE firms received 68.0% of non-M/WBE dollars.
- Table 4-27 presents data on the firm concentration in NAICS 484220. Here, the contract dollars received by Native American firms were more concentrated than the contract dollars by non-M/WBE firms. Two Native American firms received all Native American dollars; the top three non-M/WBE firms received 81.2% of non-M/WBE dollars.

NAICS Code	NAICS Code Label	Weight	Share of Total Native American Dollars	Share of Total Non-M/WBE Dollars
237110	Water and Sewer Line and Related Structures Construction	15.1%	44.3%	14.7%
238910	Site Preparation Contractors	3.5%	26.4%	3.5%
484220	Specialized Freight (except Used Goods) Trucking, Local	1.5%	6.8%	0.1%
Total 3-cod	le Share of Total Group Dollars		77.5%	18.4%

Table 4-24: Three NAICS Codes where Native American Firms Received the Most Spending

Source: CHA analysis of City of Charlotte data

Table 4-25: Comparison of Native American and Non-M/WBE Firm ConcentrationNAICS Code 237110: Water and Sewer Line and Related Structures Construction

	Native American	Non-M/WBE
Number of Contracts	4	67
Number of Firms	2	36
Share of #1	98.2%	18.0%
Share of #2	1.8%	17.2%
Share of #3	0.0%	11.9%
Share of Top 3	100.0%	47.1%

Source: CHA analysis of City of Charlotte data

Table 4-26: Comparison of Native American and Non-M/WBE Firm Concentration NAICS Code 238910: Site Preparation Contractors

	•	
	Native American	Non-M/WBE
Number of Contracts	1	53
Number of Firms	1	35
Share of #1	100.0%	40.1%
Share of #2	0.0%	15.1%
Share of #3	0.0%	12.9%
Share of Top 3	100.0%	68.0%

	Native American	Non-M/WBE
Number of Contracts	4	28
Number of Firms	2	12
Share of #1	89.1%	50.2%
Share of #2	10.9%	24.8%
Share of #3	0.0%	6.2%
Share of Top 3	100.0%	81.2%

Table 4-27: Comparison of Native American and Non-M/WBE Firm Concentration NAICS Code 484220: Specialized Freight (except Used Goods) Trucking, Local

Source: CHA analysis of City of Charlotte data
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Tables 4-28 through 4-31 present data for White woman-owned firms.

- Table 4-28 presents the three NAICS codes where White woman firms received the largest share of their contract dollars. While these codes comprise 58.3% of all White woman contract dollars, the corresponding figure for non-M/WBEs was 39.1%. In particular, while the City only spent 15.1% of its dollars in NAICS code 237110, 27.3% of all White woman contract dollars came from this code. This disproportionality was evident in the other two leading codes for White woman firms: NAICS code 237310 contributed 22.5% to all White woman contract dollars and 20.2% to all the City spending; NAICS code 236210 contributed 8.4% to all White woman contract dollars and 3.5% to all the City spending.
- Table 4-29 presents data on the firm concentration in NAICS 237110. Here, the contract dollars received by White woman firms were more concentrated than the contract dollars by non-M/WBE firms. The top three White woman firms received 90.1% of all White woman dollars; the top three non-M/WBE firms received 47.1% of non-M/WBE dollars.
- Table 4-30 presents data on the firm concentration in NAICS 237310. Here, the contract dollars received by White woman firms were more concentrated than the contract dollars by non-M/WBE firms. The top three White woman firms received 74.5% of all White woman dollars; the top three non-M/WBE firms received 69.6% of non-M/WBE dollars.
- Table 4-31 presents data on the firm concentration in NAICS 236210. In this code, only one White woman firm and two non-M/WBE firms received any contracts from the City.

NAICS Code	NAICS Code Label	Weight	Share of Total White Woman Dollars	Share of Total Non-M/WBE Dollars
237110	Water and Sewer Line and Related Structures Construction	15.1%	27.3%	14.7%
237310	Highway, Street, and Bridge Construction	20.2%	22.5%	21.1%
236210	Industrial Building Construction	3.5%	8.4%	3.3%
Total 3-cod	le Share of Total Group Dollars		58.3%	39.1%

Table 4-28: Three NAICS Codes where White Woman Firms Received the Most Spending

Source: CHA analysis of City of Charlotte data

Table 4-29: Comparison of White Woman and Non-M/WBE Firm ConcentrationNAICS Code 237110: Water and Sewer Line and Related Structures Construction

	White Woman	Non-M/WBE
Number of Contracts	14	67
Number of Firms	10	36
Share of #1	70.4%	18.0%
Share of #2	15.5%	17.2%
Share of #3	4.2%	11.9%
Share of Top 3	90.1%	47.1%

Source: CHA analysis of City of Charlotte data

Table 4-30: Comparison of White Woman and Non-M/WBE Firm ConcentrationNAICS Code 237310: Highway, Street, and Bridge Construction

	White Woman	Non-M/WBE
Number of Contracts	42	99
Number of Firms	20	45
Share of #1	44.2%	37.2%
Share of #2	19.0%	17.1%
Share of #3	11.3%	15.2%
Share of Top 3	74.5%	69.6%

	White Woman	Non-M/WBE
Number of Contracts	1	2
Number of Firms	1	2
Share of #1	100.0%	99.8%
Share of #2	0.0%	0.2%
Share of #3	0.0%	0.0%
Share of Top 3	100.0%	100.0%

Table 4-31: Comparison of White Woman and Non-M/WBE Firm Concentration NAICS Code 236210: Industrial Building Construction

Source: CHA analysis of C	City of Charlotte data
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The data presented in Tables 4-12 through 4-31 support the inference that regardless of any statistical disparities between contract utilization and weighted availability, the experiences of M/WBEs with respect to participation in the City procurement programs is significantly different than the experiences of non-M/ WBEs:

- The NAICS codes where M/WBEs receive a large proportion of their contract dollars are different from the codes where non-M/WBEs receive a large portion of their contract dollars.
- The contract dollars that M/WBEs receive are much more concentrated in a few codes than the contract dollars that non-M/WBEs receive.
- In those NAICS codes where M/WBEs receive large portions of their contract dollars, those dollars are more concentrated among a few firms compared to non-M/WBEs in those same codes.

These results suggest that while a few M/WBEs in a few industries have been able to enjoy equal opportunities, access to City contracts and subcontracts is still not equally available to all firms.

F. Disparity Analysis of M/WBEs for the City's Contracts

As required by strict constitutional scrutiny, we next calculated disparity ratios for each demographic group, comparing the group's total utilization compared to its total weighted availability.

A *disparity ratio* is the relationship between the utilization and weighted availability (as determined in the section above). Mathematically, this is represented by: DR = U/WA

Where DR is the disparity ratio; U is utilization rate; and WA is the weighted availability.

The courts have held that disparity results must be analyzed to determine whether the results are "significant". There are two distinct methods to measure a result's significance. First, a "large" or "substantively significant" disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. A substantively significant disparity supports the inference that the

result may be caused by the disparate impacts of discrimination.¹⁹⁰ Second, statistically significant disparity means that an outcome 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.¹⁹¹ A more indepth discussion of statistical significance is provided in Appendix C.

Substantive and Statistical Significance

- Connotes these values are substantively significant. Courts have ruled the disparity ratio less or equal to 80 percent represent disparities that are substantively significant. (See Footnote 190 for more information.)
- * Connotes these values are statistically significant at the 0.05 level. (See Appendix C for more information.)
- ** Connotes these values are statistically significant at the 0.01 level. (See Appendix C for more information.)
- *** Connotes these values are statistically significant at the 0.001 level. (See Appendix C for more information.)

Table 4-32 presents the disparity ratios for each demographic group. The disparity ratios for Native Americans are substantively significant. No other ratios are statistically or substantively significant.

^{190.} See U.S. Equal Employment Opportunity Commission regulation, 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.").

^{191.} A chi-square test – examining if the utilization rate was different from the weighted availability - was used to determine the statistical significance of the disparity ratio.

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	61.9% [‡]	100.8%	521.5%	135.8%	106.1%	80.5%	92.0%	97.9%

Table 4-32: Disparity Ratios by Demographic Group

Source: CHA analysis of City of Charlotte data ‡ Indicates substantive significance

It is standard CHA practice to explore any M/WBE disparity ratio that exceeds 100%. This is to ensure that an abnormal pattern of M/WBE concentration does not account for disparity ratios greater than 100%, thereby leading to the unwarranted conclusion that race-conscious or gender-conscious remedies are no longer needed to redress discrimination against a particular socially disadvantaged group. It is possible that a group's disparity ratio that is larger than 100% might be the result of the success of a few firms and not indicative of the experiences of the broad set of firms in that group. This exploration entails further examination of any NAICS codes where:

- The NAICS code share of overall spending is at least five percent.
- The particular M/WBE utilization in that code is at least five percent.

Table 4-33 presents the seven codes where the weight of the City's spending exceeded 5.0% and the M/WBE utilization in each code also exceeded 5.0%. The weight threshold of 5.0% was selected because those seven codes captured 67.4% of all City spending and the next highest weights were under 4.0%.

NAICS	NAICS Code	Weight in Each	Rank	M/WBE Utilization in Each Code					
NAICS	Description	Code	капк	Black	Hispanic	Asian	Native American	White Woman	
237310	Highway, Street, and Bridge Construction	20.2%	1	0.4%	1.3%	0.4%	0.0%	6.5%	
237110	Water and Sewer Line and Related Structures Construction	15.1%	2	0.0%	0.3%	0.0%	3.1%	10.5%	
524114	Direct Health and Medical Insurance Carriers	11.0%	3	0.0%	0.0%	0.0%	0.0%	0.0%	
541330	Engineering Services	5.8%	4	0.7%	0.1%	0.1%	0.8%	0.5%	

Table 4-33: Targeted NAICS Codes for Further Exploration of M/WBE Contract Dollars

NAICS	NAICS Code	Weight in Each Rank		M/WBE Utilization in Each Code				
NAICS	Description	Code	Rank	Black	Hispanic	Asian	Native American	White Woman
237990	Other Heavy and Civil Engineering Construction	5.2%	5	0.0%	0.0%	23.7%	0.9%	0.0%
481219	Other Nonscheduled Air Transportation	5.1%	6	0.0%	0.0%	0.0%	0.0%	0.0%
446110	Pharmacies and Drug Stores	5.0%	7	0.0%	0.0%	0.0%	0.0%	0.0%

Given these criteria, we examined more closely the utilization of Asian firms in one code (NAICS code 237990), and the utilization of White Woman firms in two codes (NAICS codes 237310 and 237110). Tables 4-34 through 4-38 present the results of this investigation.

Table 4-34 presents the NAICS code selected to further explore the Asian disparity ratio. NAICS codes 237990 ranked fifth in terms of the overall amount of the City spending in each code. Of the top seven NAICS codes, this was the only code where Asian utilization exceeded five percent.

Table 4-34: Targeted NAICS Codes for Further Exploration – Asian

NAICS	NAICS Code Description	Weight	Overall Weight Rank	Asian Utilization
237990	Other Heavy and Civil Engineering Construction	5.2%	5	23.7%

Source: CHA analysis of City of Charlotte data

In Table 4-35, we explore the levels of firm concentration by examining several factors:

- The NAICS code's share of all the City spending with Asian firms compared to the NAICS code's share of the City spending received by non-M/WBEs. This examines how important spending in the NAICS code was to the overall revenue received by Asian firms compared to that same metric for non-M/WBEs. In a world where race and gender did not affect outcomes, the share would be similar.
- The number of Asian firms that received contracts compared to the number of non-M/WBEs that received contracts.

- The share of Asian contract dollars in each NAICS code received by the first, second, and third largest Asian firms compared to the corresponding non-M/WBEs.
- The aggregate share of Asian contract dollars received by the top three Asian firms and the corresponding figure for non-M/WBEs.
- The aggregate share of Asian contract dollars received by Asian firms outside of the top three firms along with the corresponding figure for the non-M/WBEs outside of the top three.

These five metrics evaluate whether fewer Asian firms received contracts compared to non-M/WBEs and whether the Asian contract dollars were more concentrated compared to the level of concentration among non-M/WBEs. If either was the case, then the high level of utilization by Asian firms (and hence, the high disparity ratio) resulted from the success of a few Asian firms and not from a distribution across the entire spectrum of Asian firms. This would be in contrast to a wider spectrum of success among non-M/WBE firms.

Table 4-35 presents these data for Asian firms and non-M/WBEs in NAICS Code 238220. One Asian firm received a contract from the City for work in this code; in contrast, 14 non-M/WBE firms received contracts in this code. Among these 14 firms, the leading non-M/WBE firm received 84.4% of the non-M/WBE dollars. While this concentration looks similar across the two groups, it is important to note this seeming parity occurs in the context where this spending is much more important to overall Asian dollars (65.3%) than it is for the City (5.2%) and non-M/WBEs (10.7%).

	Asian	Non-M/WBE		
NAICS code share of all spending	65.3%	10.7%		
Number of firms	1	14		
Share of group spending in NAICS code by the largest firm	100.0%	84.4%		
Share of group spending in NAICS code by the second largest firm	0.0%	8.2%		
Share of group spending in NAICS code by the third largest firm	0.0%	3.8%		
Share of group spending in NAICS code by the three largest firms	100.0%	96.4%		
Share of group spending in NAICS code by the remaining firms	0.0%	3.6%		

Table 4-35: Comparing Asian and Non-M/WBE Outcomes NAICS Code 238220: Plumbing, Heating, and Air-Conditioning Contractors (NAICS Code Weight of All the City Spending: 5.2%)

The approach used to examine the Asian disparity ratio was also used for the disparity ratio for White woman firms.

Table 4-36 presents the two NAICS codes selected to further explore the White woman disparity ratio. NAICS codes 237310, and 237110 ranked first and second respectively in terms of the overall amount of the City spending in each code. Of the top seven NAICS codes, these two were the only codes where White woman utilization exceeded five percent.

Table 4-36: Targeted NAICS Codes for Further Exploration - White Women

NAICS	NAICS Code Description	Weight	Overall Weight Rank	White Woman Utilization
237310	Highway, Street, and Bridge Construction	20.2%	1	6.5%
237110	Water and Sewer Line and Related Structures Construction	15.1%	2	10.5%

Source: CHA analysis of City of Charlotte data

Table 4-37 presents these data for White woman firms and non-M/WBE firms in NAICS Code 237310. This code contains 22.5% of all White woman contract dollars and 21.1% of all non-M/WBE contract dollars. Fewer White woman firms received contracts in this code compared to the number of non-M/WBE firms. The level of concentration of contract dollars was slightly greater for White woman firms than for non-M/WBE firms: the largest White woman firm received 44.2% of all White woman contract dollars in this code compared to the 37.2% of all non-M/WBE contract dollars received by the largest non-M/WBE firm. In addition, the top three White woman firms received 74.5% of all White woman dollars compared a 69.6% share for the top three non-M/WBE firms.

Table 4-37: Comparing White Women and Non-M/WBE OutcomesNAICS Code 237310: Highway, Street, and Bridge Construction

(NAICS Code Weight of All the City Spending: 20.2%)

	White Woman	Non-M/WBE
NAICS code share of all spending	22.5%	14.3%
Number of firms	20	45
Share of group spending in NAICS code by the largest firm	44.2%	37.2%
Share of group spending in NAICS code by the second largest firm	19.0%	17.1%

	White Woman	Non-M/WBE
Share of group spending in NAICS code by the third largest firm	11.3%	15.2%
Share of group spending in NAICS code by the three largest firms	74.5%	69.6%
Share of group spending in NAICS code by the remaining firms	25.5%	30.4%

Source: CHA analysis of City of Charlotte data

Table 4-38 presents these data for White woman firms and non-M/WBE firms in NAICS Code 541330. This code contains 27.3% of all White woman contract dollars but only 14.7% of all non-M/WBE contract dollars. Fewer White woman firms received contracts in this code compared to non-M/WBE firms. The level of concentration of contract dollars was greater for White woman firms than for non-M/WBE firms: the largest White woman firm received 70.4% of all White woman contract dollars in this code compared to the 18.0% of all non-M/WBE contract dollars in this code received 90.1% of all White woman dollars compared a 47.1% share for the top three non-M/WBE firms.

Table 4-38: Comparing White Women and Non-M/WBE Outcomes NAICS Code 237110: Water and Sewer Line and Related Structures Construction (NAICS Code Weight of All the City Spending: 15.1%)

	White Woman	Non-M/WBE		
NAICS code share of all spending	27.3%	17.4%		
Number of firms	10	36		
Share of group spending in NAICS code by the largest firm	70.4%	18.0%		
Share of group spending in NAICS code by the second largest firm	15.5%	17.2%		
Share of group spending in NAICS code by the third largest firm	4.2%	11.9%		
Share of group spending in NAICS code by the three largest firms	90.1%	47.1%		
Share of group spending in NAICS code by the remaining firms	9.9%	52.9%		

Source: CHA analysis of City of Charlotte data

In summary, for Asians and White women, the level of concentration might explain the groups' disparity ratio. For Asian firms, we find the high level of concentration is combined with the reality that overall Asian utilization is extremely low (0.2%). For White woman firms, we find a high level of concentration in only one of the codes, we explored. Still, in that code, overall City spending was 15.1% - the second highest weights among all of the codes. The activity in this code might explain why the White women disparity ratio is just high enough to not be declared substantively significant.

G. Conclusion

This Chapter provides the analysis of whether the City's M/WBE program has fully remediated any discrimination in its market area. We analyzed these data to understand patterns in firm concentration and disparity ratios. Overall, we found that, compared to non-M/WBEs, minority- and woman-owned firms were concentrated in a different subset of industries. Further, in some industries, only a few M/WBEs received contracts in contrast to non-M/WBEs. This suggests that although the City's M/WBE program has been quite successful in creating opportunities for minority and woman firms, these benefits have not been spread evenly across all groups or subindustries. We find the data as a whole support the conclusion that minority and woman firms have not reached parity in all aspects of the City's local contracting activities compared to non-M/WBE firms.

V. ANALYSIS OF DISPARITIES IN THE STATE OF NORTH CAROLINA ECONOMY

A. Introduction

The late Nobel Prize Laureate Kenneth Arrow, in his seminal paper on the economic analysis of discrimination, observed:

Racial discrimination pervades every aspect of a society in which it is found. It is found above all in attitudes of both races, but also in social relations, in intermarriage, in residential location, and frequently in legal barriers. It is also found in levels of economic accomplishment; this is income, wages, prices paid, and credit extended.¹⁹²

This Chapter explores the data and literature relevant to how discrimination in the State of North Carolina¹⁹³ economy affects the ability of minorities and women to fairly and fully engage in City of Charlotte ("City") contract opportunities. First, we analyze the rates at which Minority-owned and Woman-Owned Business Enterprises ("M/WBEs") in the City of Charlotte area economy form firms and their earnings from those firms. Next, we summarize the literature on barriers to equal access to commercial credit. Finally, we summarize the literature on barriers to equal access to human capital. All three types of evidence have been found by the courts to be relevant and probative of whether a government will be a passive participant in discrimination without some type of affirmative intervention.

A key element to determine the need for the City to intervene in its market through contract goals is an analysis of the extent of disparities independent of the agency's intervention through its contracting affirmative action program.

The courts have repeatedly held that analyses of disparities in the rate of M/WBE formation in the government's markets as compared to similar non-M/WBEs, disparities in M/WBE earnings, and barriers to access to capital markets are highly relevant to a determination of whether market outcomes are affected by race or

^{192.} Arrow, Kenneth J., "What Has Economics to say about racial discrimination?" *Journal of Economic Perspectives*, 12, 2, (1998), 91-100.

^{193.} As explained in Chapter IV, the City of Charlotte's geographic market area is the state of North Carolina and York County, South Carolina, as established by the location of the firms with which it contracted during the Study period.

gender ownership status.¹⁹⁴ Similar analyses supported the successful legal defense of the Illinois Tollway's Disadvantaged Business Enterprise ("DBE") Program from constitutional challenge.¹⁹⁵

Similarly, the Tenth Circuit Court of Appeals also upheld the U.S. Department of Transportation's DBE program, and in doing so, stated that this type of evidence

demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination, precluding from the outset competition for public construction contracts by minority enterprises. The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination, precluding existing minority firms from effectively competing for public construction contracts. The government also presents further evidence in the form of local disparity studies of minority subcontracting and studies of local subcontracting markets after the removal of affirmative action programs... The government's evidence is particularly striking in the area of the race-based denial of access to capital, without which the formation of minority subcontracting enterprises is stymied.¹⁹⁶

Business discrimination studies and lending studies are relevant and probative because they show a strong link between the disbursement of public funds and the channeling of those funds due to private discrimination. In unanimously upholding the USDOT DBE Program, federal courts agree that disparities between the earnings of minority-owned firms and similarly situated non-minority-owned firms and the disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners are strong evidence of the continuing effects of discrimination.¹⁹⁷ "Evidence that private dis-

^{194.} See the explanation in Chapter II of the legal standards applicable to contracting affirmative action programs.

^{195.} Midwest Fence Corp. v. Illinois Department of Transportation, Illinois State Toll Highway Authority et al, 840 F.3d 942 (7th Cir. 2016) (upholding the Illinois Tollway's program for state funded contracts modeled after Part 26 and based on CHA's expert testimony, including about disparities in the overall Illinois construction industry); *Midwest Fence Corp. v. Illinois Department of Transportation, Illinois State Toll Highway Authority et al*, 2015 WL 1396376 at * 21 (N.D. Ill.) ("Colette Holt [& Associates'] updated census analysis controlled for variables such as education, age, and occupation and still found lower earnings and rates of business formation among women and minorities as compared to white men."); *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003) (holding that City of Chicago's M/WBE program for local construction contracts satisfied "compelling interest" standards using this framework).

^{196.} Adarand Constructors, Inc. v. Slater, 228 F.3d 1147, 1168-1169 (10th Cir. 2000), cert. granted then dismissed as improvidently granted, 532 U.S. 941 (2001).

^{197.} Northern Contracting, Inc. v. Illinois Department of Transportation, 2005 U.S. Dist. LEXIS 19868, at *64 (Sept. 8, 2005).

crimination results in barriers to business formation is relevant because it demonstrates that M/WBEs are precluded *at the outset* from competing for public construction contracts. Evidence of barriers to fair competition is also relevant because it again demonstrates that *existing* M/WBEs are precluded from competing for public contracts."¹⁹⁸

This type of court-approved analysis is especially important for an agency such as the City, which has been implementing a program for many years. The agency's remedial market interventions through the use of race- and gender-conscious contract goals may ameliorate the disparate impacts of marketplace discrimination in the agency's own contracting activities. Put another way, the program's success in moving towards parity for minority and woman firms may be "masking" the effects of discrimination that, but for the contract goals, would mirror the disparities in M/WBE utilization in the overall economy.

To explore the question of whether firms owned by non-Whites and White women face disparate treatment in the City marketplace outside of the City contracts, we examined two data sets. The first data set was the U.S. Bureau of the Census' *American Community Survey* ("ACS"), which provided data to analyze disparities using individual entrepreneurs as the basic unit of analysis.¹⁹⁹ We used the State of North Carolina as the geographic unit of analysis. We found disparities in wages, business earnings and business formation rates for minorities and women in all industry sectors in the City's marketplace.²⁰⁰

The second data set was the U.S. Bureau's Annual Business Survey ("ABS"). The ABS supersedes the more well-known Survey of Business Owners ("SBO"). The SBO was last conducted in 2012 and historically has been reported every five years. In contrast, the ABS was first conducted in 2017 and it is the Census Bureau's goal to release results annually. As of the writing of this report, the most recent complete ABS contains 2017 data. With the ABS data, we explored if the share of business receipts, number of firms, and payroll for firms owned by non-Whites and White women was greater than, less than, or equal to the share of all firms owned by non-Whites and White women. Results of the analysis of the ABS data indicate that non-Whites and White women share of all employer firms is greater than their share of sales, payrolls, and employees. Pt another way, there are disparities between the outcomes for minority- and woman-owned firms compared to similar

^{198.} *Id*.

^{199.} Data from 2015 - 2019 American Community Survey are the most recent for a five-year period.

^{200.} Possible disparities in wages is important to explore because of the relationship between wages and business formation. Research by Alicia Robb and others indicate non-White firms rely on their own financing to start businesses compared to White firms who rely more heavily on financing provided by financial institutions. To the extent non-Whites face discrimination in the labor market, they would have reduced capacity to self-finance their entrepreneurial efforts and, hence, impact business formation. *See, for example,* Robb's "Access to Capital among Young Firms, Minority-owned Firms, Woman-owned Firms, and High-tech Firms" (2013), https://www.sba.gov/sites/default/files/files/rs403tot(2).pdf.

White-males owned firms. This supports the conclusion that barriers to business success disproportionately affect non-Whites and White women.

B. Disparate Treatment in the City of Charlotte's Marketplace: Evidence from the Census Bureau's 2015 - 2019 American Community Survey

As discussed in the beginning of this Chapter, the key question is whether firms owned by non-Whites and White women face disparate treatment in the marketplace without the intervention of the Charlotte Business Inclusion Program. In this section, we use the Census Bureau's ACS data to explore this and other aspects of this question. One element asks if demographic differences exist in the wage and salary income received by private sector workers. Beyond the issue of bias in the incomes generated in the private sector, this exploration is important for the issue of possible variations in the rate of business formation by different demographic groups. One of the determinants of business formation is the pool of financial capital at the disposal of the prospective entrepreneur. The size of this pool is related to the income level of the individual either because the income level impacts the amount of personal savings that can be used for start-up capital, or the income level affects one's ability to borrow funds. Consequently, if particular demographic groups receive lower wages and salaries then they would have access to a smaller pool of financial capital, and thus reduce the likelihood of business formation.

The American Community Survey Public Use Microdata Sample ("PUMS") is useful in addressing these issues. The ACS is an annual survey of one percent of the population and the PUMS provides detailed information at the individual level. In order to obtain robust results from our analysis, we used the file that combines the most recent data available for years 2015 through 2019.²⁰¹ With this rich data set, our analysis can establish with greater certainty any causal links between race, gender and economic outcomes.

The Census Bureau classifies Whites, Blacks, Native Americans, and Asians as racial groupings. CHA developed a fifth grouping, "Other", to capture individuals who are not a member of the above four racial categories. In addition, Hispanics are an ethnic category whose members could be of any race, *e.g.*, Hispanics could be White or Black. In order to avoid double counting – *i.e.*, an individual could be counted once as Hispanic and once as White – CHA developed non-Hispanic subset racial categories: non-Hispanic Whites; non-Hispanic Blacks; non-Hispanic Native Americans; non-Hispanic Asians; and non-Hispanic Others. When those five

^{201.} Initially, the Census Bureau contacted approximately 3.5M households. For the analysis reported in this Chapter, we examined over 224,000 observations. For more information about the ACS PUMS, see https://www.census.gov/pro-grams-surveys/acs/.

groups are added to the Hispanic group, the entire population is counted and there is no double-counting. When Whites are disaggregated into White men and White women, those groupings are non-Hispanic White men and non-Hispanic White women. For ease of exposition, the groups in this report are referred to as Black, Native American, Asian, Other, White women, and White men, while the actual content is the non-Hispanic subset of these racial groups.

Often, the general public sees clear associations between race, gender, and economic outcomes and assumes this association reflects a tight causal connection. However, economic outcomes are determined by a broad set of factors including, and extending beyond, race and gender. To provide a simple example, two people who differ by race or gender may receive different wages. This difference may simply reflect that the individuals work in different industries. If this underlying difference is not known, one might assert the wage differential is the result of race or gender difference. To better understand the impact of race or gender on wages, it is important to compare individuals of different races or genders who work in the same industry. Of course, wages are determined by a broad set of factors beyond race, gender, and industry. With the ACS PUMS, we have the ability to include a wide range of additional variables such as age, education, occupation, and state of residence in the analysis.

We employ a multiple regression statistical technique to process this data. This methodology allows us to perform two analyses: an estimation of how variations in certain characteristics (called independent variables) will impact the level of some particular outcome (called a dependent variable), and a determination of how confident we are that the estimated variation is statistically different from zero. We have provided a more detailed explanation of this technique in Appendix A.

With respect to the first result of regression analysis, we examine how variations in the race, gender, and industry of individuals impact the wages and other economic outcomes received by individuals. The technique allows us to determine the effect of changes in one variable, assuming that the other determining variables are the same. That is, we compare individuals of different races, but of the same gender and in the same industry; or we compare individuals of different genders, but of the same race and the same industry; or we compare individuals in different industries, but of the same race and gender. We determine the impact of changes in one variable (*e.g.*, race, gender or industry) on another variable (wages), "controlling for" the movement of any other independent variables.

With respect to the second result of regression analysis, we determine the statistical significance of the relationship between the dependent variable and independent variable. For example, the relationship between gender and wages might exist (*e.g.*, holding all other factors constant, women earn less than men), but we find that it is not statistically different from zero. In this case, we are not confident

that there is not any relationship between the two variables. If the relationship is not statistically different from zero, then a variation in the independent variable has no impact on the dependent variable. The regression analysis allows us to say with varying degrees of statistical confidence that a relationship is different from zero. If the estimated relationship is statistically significant at the 0.05 level, that indicates that we are 95% confident that the relationship is different from zero; if the estimated relationship is statistically significant at the 0.01 level, that indicates that we are 99% confident that the relationship is different from zero; if the estimated relationship is statistically significant at the 0.001 level, that indicates that we are 99% confident that the relationship is different from zero; if the estimated relationship is statistically significant at the 0.001 level, that indicates that we are 99.9% confident that the relationship is different from zero.²⁰²

In the following presentation of results, each sub-section first reports data on the share of a demographic group that forms a business (business formation rates); the probabilities that a demographic group will form a business relative to White men (business formation probabilities); the differences in wages received by a demographic group relative to White men (wage differentials); and the differences in business earnings received by a demographic group relative to White men (business earnings received by a demographic group relative to White men (business earnings differentials). Because the ACS contained limited observations for certain groups in particular industries, we were unable to provide reliable estimates for business outcomes for these groups. However, there were always sufficient observations in the sample of wage earners in each group in each industry to permit us to develop reliable estimates.

1. All Industries Combined in the State of North Carolina

One method of exploring differences in economic outcomes is to examine the rate at which different demographic groups form businesses. We developed these business formation rates using data from the U.S. Bureau of the Census' ACS for the State of North Carolina. We used the State in this analysis in order to closely align with the geographic market determined in the previous chapter. Table 5-1 presents these results. As stated above, the business formation rate represents the share of a population that forms businesses. When developing industry-specific rates, we examine the population that works in that particular industry and identify what share of that sub-population that form businesses. For example, Table 5-1 indicates that 1.8% of Blacks forms businesses; this is less than the 6.2% business formation rate for White men. The Table indicates that White men have higher business formation rates compared to non-Whites and White women. Table 5-2 utilizes probit regression analysis to examine the probability of forming a business after controlling for important factors beyond race and gender.²⁰³ This Table indicates that non-

^{202.} Most social scientists do not endorse utilizing a confidence level of less than 95%. Appendix C explains more about statistical significance.

^{203.} Appendix B provides a "Further Explanation of Probit Regression Analysis."

Whites and White women are less likely to form businesses compared to White men; the reduced probability ranges from 0.6% for Asian/Pacific Islanders to 3.8% for Blacks. These results were statistically significant at the 0.001 level for Blacks and Hispanics; the 0.01 level for Native Americans; and the 0.05 level for White women.

With respect to the interpretation of the level of statistical significance of a result, as indicated in the latter part of the previous section, we are exploring whether the result of the regression analysis is statistically different from zero; if the finding is statistically significant, we also indicate the level of statistical confidence at which the result is accurate. Table 5-2 indicates that the probability that Blacks form businesses is 3.8% less than the probability that White men form businesses, once we control for age, education, and occupation. The statistical significance of this result is at the 0.001 level, which means we are 99.9% statistically confident the result is true. If a result is non-zero but the result is not statistically significant, then we cannot rule out zero being the true result. Note: this does not mean the result is wrong, only there is not a statistically significant level of confidence in the result. Another way to measure equity is to examine how the wage and salary incomes and business earnings of particular demographic groups compare to White men. Multiple regression statistical techniques allowed us to examine the impact of race and gender on economic outcomes while controlling for other factors, such as education and

age.²⁰⁴ Tables 5-3 and 5-4 present this data on wage and salary incomes and business earnings respectively. Table 5-4 indicates that non-Whites and White women earn less than White men. The reduction in earnings ranges from 18.0% to 35.4% and all the results are statistically significant at the 0.001 level. Table 5-4 indicates that the coefficients for Blacks, Others, and White women are statistically significant and negative; indicating that those firms receive business earnings less than White men.

	,
Demographic Group	Business Formation Rates
Black	1.8%
Hispanic	3.2%
Native American	2.3%
Asian/Pacific Islander	4.7%
Other	2.6%

Table 5-1: Business Formation Rates All Industries, 2015 - 2019

^{204.} See Appendix A for more information on multiple regression statistical analysis.

Demographic Group	Business Formation Rates
White Women	3.4%
M/WBE	2.9%
White Male	6.2%

Source: CHA calculations from the American Community Survey

Table 5-2: Business Formation Probabilities Relative to White Males All Industries, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.8%***
Hispanic	-2.0%***
Native American	-3.5%**
Asian/Pacific Islander	-0.6%
Other	-2.7%
White Women	-2.2%*

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 level

Table 5-3: Wage Differentials for Selected Groups Relative to White Men All Industries, 2015 - 2019

Demographic Group	Wages Relative to White Men (% Change)
Black	-34.9% ^{***}
Hispanic	-18.0%***
Native American	-22.0%***
Asian/Pacific Islander	-24.7% ^{***}
Other	-33.6%***
White Women	-35.4%***

Source: CHA calculations from the American Community Survey *** Indicates statistical significance at the 0.001 level

Demographic Group	Earnings Relative to White Men (% Change)
Black	-56.4% ^{***}
Hispanic	7.9%
Native American	-54.4%
Asian/Pacific Islander	1.5%
Other	-105.0% ^{*a}
White Women	-40.2%***

Table 5-4: Business Earnings Differentials for Selected Groups Relative to White Men All Industries

a. The proper way to interpret a coefficient that is less than negative 100% (e.g., the value of the coefficient for Other in Table 5-4), is the percentage amount non-M/ WBEs earn that is more than the group in question. In this case, non-M/WBEs earn 105% more than Others.

Source: CHA calculations from the American Community Survey

- *** Indicates statistical significance at the 0.001 level
 - * Indicates statistical significance at the 0.05 level

2. The Construction Industry in the State of North Carolina

There were low numbers of Asian and Other firms in the sample of the construction industry; consequently, reliable estimates of firm outcomes could not be made for these groups. Table 5-5 indicates that White men have higher business formation rates compared to non-Whites and White women. Table 5-6 indicates that non-Whites and White women are less likely to form businesses compared to similarly situated White men. The reduced probabilities of business formation ranged from 7.9% to 4.0%. All of these coefficients were statistically significant at the 0.01 level or 0.05 level. Table 5-7 indicates that non-Whites and White women earn less than White men. Only the coefficients for Blacks (-30.1%), Asians (-44.0%) and White women (29.3%) were statistically significant, with all statistically significance level of 0.001. Table 5-8 indicates that only the Hispanic coefficient was statistically significant.

Demographic Group	Business Formation Rates
Black	4.4%
Hispanic	5.4%
Native American	6.0%
Asian/Pacific Islander	
Other	
White Women	11.3%
M/WBE	6.1%
White Male	13.7%

Table 5-5: Business Formation Rates, Construction, 2015 - 2019

Source: CHA calculations from the American Community Survey

Table 5-6: Business Formation Probability Differentials for Selected GroupsRelative to White Men, Construction, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-7.9%**
Hispanic	-4.0%*
Native American	-7.7%*
Asian/Pacific Islander	
Other	
White Women	-4.3%*

Source: CHA calculations from the American Community Survey

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 level

Demographic Group	Wages Relative to White Men (% Change)
Black	-30.1% ^{***}
Hispanic	-1.2%
Native American	-6.8%
Asian/Pacific Islander	-44.0%***
Other	-10.4%
White Women	-29.3% ^{***}

Table 5-7: Wage Differentials for Selected Groups Relative to White Men Construction, 2015 - 2019

Source: CHA calculations from the American Community Survey *** Indicates statistical significance at the 0.001 level

Table 5-8: Business Earnings Differentials for Selected Groups Relative to White Men Construction, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	-16.6%
Hispanic	124.0%**
Native American	35.8%
Asian/Pacific Islander	
Other	
White Women	-27.9%

Source: CHA calculations from the American Community Survey ** Indicates statistical significance at the 0.01 level

3. The Construction-Related Services Industry in the State of North Carolina

The sample of firms in the construction-related services industry contained too few numbers of Black, Hispanic, Native American, Asian, and Other firms to produce reliable estimates these groups' business outcomes. The coefficients for the wages for Blacks, Hispanics, and White women were statistically significant and they ranged from -31.4% to -20.1%.

Demographic Group	Business Formation Rates
Black	
Hispanic	
Native American	
Asian/Pacific Islander	
Other	
White Women	2.2%
M/WBE	
White Male	8.3%

Table 5-9: Business Formation RatesConstruction-Related Services, 2015 - 2019

Source: CHA calculations from the American Community Survey

Table 5-10: Business Formation Probability Differentials for Selected GroupsRelative to White Men, Construction-related Services, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	
Hispanic	
Native American	
Asian/Pacific Islander	
Other	
White Women	-5.0%

Source: CHA calculations from the American Community Survey

Table 5-11: Wage Differentials for Selected Groups Relative to White Men Construction-Related Services, 2015 - 2019

Demographic Group	Wages Relative to White Men (% Change)
Black	-20.1%**
Hispanic	-24.3%**
Native American	-39.5%

Demographic Group	Wages Relative to White Men (% Change)
Asian/Pacific Islander	-1.1%
Other	-8.7%
White Women	-31.4%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

Table 5-12: Business Earnings Differentials for Selected Groups Relative to White Men Construction-related Services, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	
Hispanic	
Native American	
Asian/Pacific Islander	
Other	
White Women	-67.3%

Source: CHA calculations from the American Community Survey

4. The Goods Industry in the State of North Carolina

The sample of Native American and Other firms in the construction-related services industry contained too few numbers to produce reliable estimates of these groups' business outcomes. Table 5-13 indicates that Hispanics and Asians have higher business formation rates compared to White men. While Table 5-14 indicates that Blacks and White women have a lower probability of forming businesses compared to White men and the results is statistically significant. Table 5-15 indicates that statistically significant results are found for five groups (Black; Hispanic; Asian; Others; and White women) and all indicate lower wages relative to White men. Table 5-16 indicates that only the coefficient for White woman business earnings were statistically significant.

Demographic Group	Business Formation Rates
Black	1.6%
Hispanic	5.3%
Native American	
Asian/Pacific Islander	6.3%
Other	
White Women	3.1%
M/WBE	3.0%
White Male	4.9%

Table 5-13: Business Formation Rates Goods, 2015 - 2019

Source: CHA calculations from the American Community Survey

Table 5-14: Business Formation Probabilities Relative to White MalesGoods, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.5%**
Hispanic	0.8%
Native American	
Asian/Pacific Islander	1.7%
Other	
White Women	-1.7%*

Source: CHA calculations from the American Community Survey

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 level

Demographic Group	Wages Relative to White Men (% Change)
Black	-32.6% ^{***}
Hispanic	-20.8% ^{***}
Native American	-0.8%
Asian/Pacific Islander	-39.3% ^{***}
Other	-54.1%***
White Women	-41.1%

Table 5-15: Wage Differentials for Selected Groups Relative to White Men Goods, 2015 - 2019

Source: CHA calculations from the American Community Survey *** Indicates statistical significance at the 0.001 level

Table 5-16: Business Earnings Differentials for Selected Groups Relative to White MenGoods, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	-105.0%
Hispanic	116.0%
Native American	
Asian/Pacific Islander	11.4%
Other	
White Women	-121.0%*

Source: CHA calculations from the American Community Survey * Indicates statistical significance at the 0.05 level

5. The Services Industry in the State of North Carolina

Table 5-17 indicates that White men have higher business formation rates compared to non-Whites and White women. Table 5-18 indicates that Blacks, Hispanics, Native Americans and White women are less likely to form businesses compared to similarly situated White men and the coefficients are statistically significant. Table 5-19 indicates that non-Whites and White women earn less than White men – ranging from 17.9% to 35.4% – and these coefficients were statistically significant. Table 5-20 indicates that White womanowned firms earned less than White male-owned firms and the coefficient was statistically significant.

Demographic Group	Business Formation Rates
Black	2.1%
Hispanic	3.2%
Native American	2.0%
Asian/Pacific Islander	4.6%
Other	4.1%
White Women	3.7%
M/WBE	3.2%
White Male	7.0%

Table 5-17: Business Formation Rates Services, 2015 - 2019

Source: CHA calculations from the American Community Survey

Table 5-18: Business Formation Probability Differentials for Selected GroupsRelative to White Men, Services, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.1%***
Hispanic	-1.4%*
Native American	-3.1%*
Asian/Pacific Islander	-0.8%
Other	-1.0%
White Women	-2.0%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

* Indicates statistical significance at the 0.05 level

Demographic Group	Wages Relative to White Men (% Change)
Black	-35.4% ^{***}
Hispanic	-17.9% ^{***}
Native American	-27.7% ^{***}
Asian/Pacific Islander	-20.9% ^{***}
Other	-31.8% ^{***}
White Women	-33.4% ^{***}

Table 5-19: Wage Differentials for Selected Groups Relative to White Men Services, 2015 - 2019

Source: CHA calculations from the American Community Survey *** Indicates statistical significance at the 0.001 level

Table 5-20: Business Earnings Differentials for Selected Groups Relative to White Men Services, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	-24.3%
Hispanic	2.0%
Native American	-23.9%
Asian/Pacific Islander	9.7%
Other	-114.0%
White Women	-33.5%**

Source: CHA calculations from the American Community Survey ** Indicates statistical significance at the 0.01 level

6. The Information Technology Industry in the State of North Carolina

There were low numbers of Native American and Other firms sampled in the information technology industry. Therefore, reliable estimates of firm outcomes could not be made in this sector. Table 5-21 indicates that White men have higher business formation rates compared to Asians but lower compared to White women. Table 5-22 indicates that only of the coefficient for Blacks was statistically significant. Table 5-23 indicates that non-Whites and White women earn less than White men and the coefficients for Blacks, Hispanics,

Asians, and White women were statistically significant. Table 5-24 indicates that none of the business coefficients were statistically significant.

Table 5-21: Business Formation RatesInformation Technology, 2015 - 2019

Demographic Group	Business Formation Rates
Black	1.2%
Hispanic	4.7%
Native American	
Asian/Pacific Islander	2.4%
Other	
White Women	2.8%
M/WBE	2.3%
White Male	5.2%

Source: CHA calculations from the American Community Survey

Table 5-22: Business Formation Probability Differentials for Selected GroupsRelative to White Men, Information Technology, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.2%*
Hispanic	0.1%
Native American	
Asian/Pacific Islander	-3.2%
Other	
White Women	-1.9%

Source: CHA calculations from the American Community Survey * Indicates statistical significance at the 0.05 level

Demographic Group	Wages Relative to White Men (% Change)
Black	-35.9% ^{***}
Hispanic	-24.7%***
Native American	-14.0%
Asian/Pacific Islander	-8.2%*
Other	-21.5%
White Women	-30.4%***

Table 5-23: Wage Differentials for Selected Groups Relative to White Men Information Technology, 2015 - 2019

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

* Indicates statistical significance at the 0.05 level

Table 5-24: Business Earnings Differentials for Selected Groups Relative to White Men Information Technology, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	-214.0%
Hispanic	-105.0%
Native American	
Asian/Pacific Islander	-101.0%
Other	
White Women	-29.3%

Source: CHA calculations from the American Community Survey

Overall, the data presented in the above Tables indicate that non-Whites and White women form businesses less than White men and their wage and business earnings are less than those of White men. These analyses support the conclusion that barriers to business success do affect non-Whites and White women.

C. Comparison of Business Formation Rates in the Charlotte Metropolitan Area: 2007 to 2019

In addition to our analysis of the most recent ACS data, the City required we also compare the growth of minority- and woman-owned firms to non-M/WBEs over time. Prior to presenting data on economic outcomes for non-White and White women owned firms relative to firms owned by White males, this section will provide some context by presenting business formation rates derived from the ACS for different demographic groups at three points in time: 2007, 2014, and 2019.²⁰⁵ The business formation rate represents the share of a population that forms businesses. When developing industry-specific rates, we examine the population that works in that particular industry and identify what share of that sub-population that form businesses. We present data from the 2007, 2014 and 2019 ACS below.

Throughout all data sets, White men had higher business formation rates than other groups. Examining each of the M/WBE groups across the years, Blacks continued a slow rate of increase; only the rate for Hispanics showed a noticeable increase. The business formation rate fell for Asian/Pacific Islanders in 2019.²⁰⁶ The rate for White males decreased and then held steady.

Demographic Group	2007	2014	2019
Black	1.8%	2.0%	2.4%
Hispanic	1.7%	2.9%	4.1%
Native American			
Asian/Pacific Islander	7.2%	6.1%	3.9%
Other			
White Women	3.2%	2.8%	3.4%
Non-White Male	2.7%	2.7%	3.1%
White Male	7.3%	6.2%	6.2%

Table 5-25: Business Formation Rates All Industries

Source: CHA calculations from the American Community Survey

^{205.} In order to have sufficient observations in order result in robust results, we analyze the multi-year data sets for 2007 (covering years 2005-2007), 2014 (covering years 2010-2014) and 2019 (2015-2019).

^{206.} For Native American and Other, there were insufficient observations to make reliable business formation rates. Therefore, the values for those groups are represented as "-----".

D. Disparate Treatment in the Charlotte Area Marketplace: Evidence from the Census Bureau's 2017 Annual Business Survey

We further examined whether non-Whites and White women have disparate outcomes when they are active in the City of Charlotte area marketplace, which we determined to be the State of North Carolina, as explained in Chapter IV. This question is operationalized by exploring if the share of business receipts, number of firms, and payroll for firms owned by non-Whites and White women is greater than, less than, or equal to the share of all firms owned by non-Whites and White women.

To answer this question, we examined the U.S. Bureau's Annual Business Survey ("ABS"). The ABS supersedes the more well-known Survey of Business Owners ("SBO"). The SBO was last conducted in 2012 and historically has been reported every five years. In contrast, the ABS was first conducted in 2017 and it is the Census Bureau's goal to release results annually. As of the writing of this report, the most recent complete ABS contains 2017 data. The ABS surveyed about 850,000 employer firms and collected data on a variety of variables documenting ownership characteristics including race, ethnicity, and gender. It also collected data on the firms' business activity with variables marking the firms' number of employ-

ees, payroll size, sales and industry.²⁰⁷ For this analysis, we examined firms in the state of North Carolina. The state was the geographic unit of analysis because the ABS does not present data at the sub-state level.

With these data, we grouped the firms into the following ownership categories: $^{\rm 208,209}$

- Hispanics
- non-Hispanic Blacks
- non-Hispanic Native Americans
- non-Hispanic Asians
- non-Hispanic White women
- non-Hispanic White men
- Firms equally owned by non-Whites and Whites

^{207.} For more information on the Annual Business Survey see https://www.census.gov/programs-surveys/abs/about.html.

^{208.} Race and gender labels reflect the categories used by the Census Bureau.

^{209.} For expository purposes, the adjective "non-Hispanic" will not be used in this Chapter; the reader should assume that any racial group referenced does not include members of that group who identify ethnically as Hispanic.

- Firms equally owned by men and women
- Firms that were either publicly-owned or where the ownership could not be classified

For purposes of this analysis, the first four groups were aggregated to form a non-White category. Since our interest is the treatment of non-White-owned firms and White woman-owned firms, the last four groups were aggregated to form one category. To ensure this aggregated group is described accurately, we label this group "not non-White/non-White women". While this label is cumbersome, it is important to be clear this group includes firms whose ownership extends beyond White men, such as firms that are not classifiable or that are publicly traded and thus have no racial ownership. In addition to the ownership demographic data, the Survey also gathers information on the sales, number of paid employees, and payroll for each reporting firm.

We analyzed the ABS data on the following sectors:

- Construction
- Professional, Scientific and Technical Services
- Goods
- Other services

The ABS data – a sample of all businesses, not the entire universe of all businesses – required some adjustments. In particular, we had to define the sectors at the two-digit North American Industry Classification System ("NAICS") code level, and therefore our sector definitions do not exactly correspond to the definitions used to analyze the City contract data in Chapter IV, where we are able to determine sectors at the six-digit NAICS code level. At a more detailed level, the number of firms sampled in particular demographic and sector cells may be so small that the Census Bureau does not report the information, either to avoid disclosing data on businesses that can be identified or because the small sample size generates unreliable estimates of the universe. We therefore report two-digit data.

Table 5-26 presents information on which NAICS codes were used to define each sector.

ABS Sector Label	Two-Digit NAICS Codes
Construction	23
Professional, Scientific, and Technical Services ^a	54
Goods	31,42, 44
Other Services	48, 52, 53, 56, 61, 62, 71, 72, 81

Table 5-26: Two-Digit NAICS Code Definition of Sector

a. This sector includes (but is broader than just) construction-related services. It is impossible to narrow this category to construction-related services without losing the capacity to conduct race and gender specific analyses.

The balance of this Chapter reports the findings of the ABS analysis.

1. All Industries

For a baseline analysis, we examined all industries. Table 5-27 presents data on the percentage share that each group has of the total of each of the following four business outcomes:

- The number of firms with employees (employer firms)
- The sales and receipts of all employer firms
- The number of paid employees
- The annual payroll of employer firms

Panel A of Table 5-27 presents data for the four basic non-White racial groups:

- Black
- Hispanic
- Native American
- Asian

Panel B of Table 5-27 presents data for the following types of firm ownership:

- Non-White
- White women
- Not non-White/non-White women²¹⁰

Categories in Panel B are mutually exclusive. Hence, firms that are non-White and equally owned by men and women are classified as non-White and firms that are equally owned by non-Whites and Whites and equally owned by men and women are classified as equally owned by non-Whites and Whites. Since the central issue is the possible disparate treatment of non-White firms and White woman firms, we calculate three disparity ratios each for Black, Hispanic, Asian, Native American, non-White, and White woman firm respectively (a total of 18 ratios), presented in Table 5-28:

- Ratio of sales and receipts share for all employer firms over the share of total number of all employer firms.
- Ratio of sales and receipts share for employer firms over the share of total number of employer firms.
- Ratio of annual payroll share over the share of total number of employer firms.

For example, the disparity ratio of sales and receipts share for all firms over the share of total number of all employer firms for Black firms is 14.0% (as shown in Table 5-28). This is derived by taking the Black share of sales and receipts for all employer firms (0.5%) and dividing it by the Black share of total number of all employer firms (3.4%) that are presented in Table 5-27.²¹¹ If Black-owned firms earned a share of sales equal to their share of total firms, the disparity index would have been 100%. 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 "80% rule" that a ratio less than 80% presents a *prima facie* case of discrimination.²¹² All of the 18 disparity ratios for non-White firms and White woman firms are below this threshold.²¹³

^{210.} Again, while a cumbersome nomenclature, it is important to remain clear that this category includes firms other than those identified as owned by White men.

^{211.} Please note that while the numbers presented in Table 5-27 are rounded to the first decimal place, the calculations resulting in the numbers presented in Table 5-28 are based on the actual (non-rounded) figures. Therefore, the Black ratio presented in Table 5-28 of 14.0% is not the same figure as that which would be derived when you divided 0.5 by 3.4 (the numbers presented in Table 5-27).

^{212. 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 80%) 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.").

^{213.} Because the data in the subsequent tables are presented for descriptive purposes, significance tests on these results are not conducted.

	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts - All Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)		
Panel A: Distribution of	of Non-White Firms					
Black	3.4%	0.5%	1.5%	0.9%		
Hispanic	2.9%	0.6%	1.1%	0.7%		
Asian	5.5%	1.2%	2.4%	1.5%		
Native American	0.6%	0.1%	0.2%	0.2%		
Panel B: Distribution	Panel B: Distribution of All Firms					
Non-White	12.4%	2.4%	5.3%	3.3%		
White Women	16.5%	3.6%	7.0%	5.0%		
Not Non-White/Not White Women	71.1%	94.0%	87.7%	91.7%		
All Firms	100.0%	100.0%	100.0%	100.0%		

Table 5-27: Demographic Distribution of Sales and Payroll Data – Aggregated Groups All Industries, 2017

Source: CHA calculations from American Business Survey

Table 5-28: Disparity Ratios of Firm Utilization Measures

All Industries, 2017

	Ratio of Sales to Number of Employer Firms	Ratio of Employees to Number of Employer Firms	Ratio of Payroll to Number of Employer Firms		
Panel A: Disparity F	Ratio for Non-White Firms				
Black	14.0%	45.3%	26.4%		
Hispanic	20.5%	39.6%	24.9%		
Asian	21.7%	42.9%	27.3%		
Native American	20.3%	43.4%	27.9%		
Panel B: Disparity R	Panel B: Disparity Ratios for All Firms				
Non-White	19.3%	42.8%	26.5%		
White Women	21.8%	42.6%	30.2%		
Not Non-White/ Not White Women	132.2%	123.3%	129.0%		
All Firms	100.0%	100.0%	100.0%		

Source: CHA calculations from American Business Survey

This same approach was used to examine the Construction, Professional, Scientific and Technical Services, Goods, and Other Services sectors. The following are summaries of the results of the disparity analyses.

2. Construction Industry

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 5-29, 15 fall under the 80% threshold.

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity F	Ratios for Non-White Firms		
Black	26.3%	50.5%	30.8%
Hispanic	38.1%	48.6%	38.3%
Asian	57.9%	44.0%	40.7%
Native American	56.0%	70.0%	50.9%
Panel B: Disparity R	atios for All Firms		
Non-White	38.8%	51.1%	38.3%
White Women	84.9%	104.7%	100.5%
Not Non-White/ Not White Women	108.2%	104.7%	106.5%
All Firms	100.0%	100.0%	100.0%

Table 5-29: Disparity Ratios – Aggregated Groups Construction, 2017

Source: CHA calculations from American Business Survey

3. Professional, Scientific and Technical Services Industry

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 5-30, 17 fall under the 80% threshold and an eighteenth ratio is 80.9%.

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity F	Ratios for Non-White Firms		
Black	18.4%	35.6%	18.5%
Hispanic	77.6%	80.9%	62.6%
Asian	59.1%	60.6%	66.7%
Native American	26.7%	53.1%	27.2%
Panel B: Disparity Ratios for All Firms			
Non-White	49.1%	56.5%	50.2%
White Women	32.5%	42.5%	27.3%
Not Non-White/ Not White Women	126.3%	122.4%	127.7%
All Firms	100.0%	100.0%	100.0%

Table 5-30: Disparity Ratios – Aggregated Groups

Professional, Scientific and Technical Services, 2017

Source: CHA calculations from American Business Survey

4. Goods Industry

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 5-31, 18 fall under the 80% threshold.

Table 5-31: Disparity Ratios – Aggregated Groups

Goods, 2017				
	Ratio of Sales to Number of Firms(All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms	
Panel A: Disparity F	Panel A: Disparity Ratios for Non-White Firms			
Black	12.7%	28.7%	21.1%	
Hispanic	20.2%	27.7%	23.1%	
Asian	15.2%	22.1%	16.4%	
Native American	15.7%	22.2%	21.1%	
Panel B: Disparity Ratios for All Firms				
Non-White	15.9%	24.0%	18.5%	

	Ratio of Sales to Number of Firms(All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
White Women	17.6%	28.0%	24.0%
Not Non-White/ Not White Women	128.9%	125.6%	127.2%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from American Business Survey

5. Services Industry

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 5-32, all 18 fall under the 80% threshold.

Table 5-32: Disparity Ratios – Aggregated Groups

	Ratio of Sales to Number of Firms(All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity F	Ratios for Non-White Firms		
Black	51.5%	51.5%	32.6%
Hispanic	47.0%	47.0%	26.4%
Asian	49.1%	49.1%	28.6%
Native American	64.1%	64.1%	38.5%
Panel B: Disparity R	atios for All Firms		
Non-White	49.9%	49.9%	29.7%
White Women	49.0%	49.0%	32.9%
Not Non-White/ Not White Women	125.0%	125.0%	133.9%
All Firms	100.0%	100.0%	100.0%

Services, 2017

Source: CHA calculations from American Business Survey

6. Conclusion

Overall, the analysis of the ABS data presented in the above tables indicate that non-Whites and White women share of all employer firms is greater than their share of sales, payrolls, and employees. This supports the conclusion that barriers to business success disproportionately affect non-Whites and White women.

E. Evidence of Disparities in Access to Business Capital

Capital is the lifeblood of any business. Participants in the anecdotal data collection universally agreed to this fundamental fact. The interviews with business owners conducted as part of this Study confirmed that small firms, especially minority- and woman-owned firms, had difficulties obtaining needed working capital to perform on City contracts and subcontracts, as well as expand the capacities of their firms. As demonstrated by the analyses of Census Bureau data, above, discrimination may even prevent firms from forming in the first place.

There are extensive federal agency reports and much scholarly work on the relationship between personal wealth and successful entrepreneurship. There is a general consensus that disparities in personal wealth translate into disparities in business creation and ownership.²¹⁴ The most recent research highlights the magnitude of the COVID-19 pandemic's disproportionate impact on minority-owned firms.

1. Federal Reserve Board Small Business Credit Surveys²¹⁵

The Development Office of the 12 Reserve Banks of the Federal Reserve System has conducted Small Business Credit Surveys ("SBCS") to develop data on small business performance and financing needs, decisions, and outcomes.

a. 2021 Small Business Credit Survey

The 2021 SBCS²¹⁶ reached more than 15,000 small businesses, gathering insights about the COVID-19 pandemic's impact on small businesses, as well as business performance and credit conditions. The Survey yielded 9,693 responses from a nationwide convenience sample of small employer firms with between one and 499 full- or part-time employees across all 50 states and the District of Columbia. The survey was fielded in September and October 2020, approximately six months after the onset of the pandemic. The timing of the survey is important to the interpretation of the results. At the time of the survey, the Paycheck Protection Program ("PPP") authorized by the Coronavirus Relief and Economic Security Act had recently closed applications, and prospects for additional stimulus funding were uncertain. Additionally, many government-mandated business clo-

^{214.} See, e.g., Evans, David S. and Jovanovic, Boyan, "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints," Journal of Political Economy, Vol. 97, No. 4, 1989, pp. 808-827; David S. Evans and Linda S. Leighton, "Some empirical aspects of entrepreneurship," *The American Economic Review*, Vol. 79, No. 3, 1989, pp. 519-535.

^{215.} This survey offers baseline data on the financing and credit positions of small firms before the onset of the pandemic. *See* fedsmallbusiness.org.

^{216.} https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report.

sures had been lifted as the number of new COVID-19 cases plateaued in advance of a significant increase in cases by the year's end.

The 2020 survey findings highlight the magnitude of the pandemic's impact on small businesses and the challenges they anticipate as they navigate changes in the business environment. Few firms avoided the negative impacts of the pandemic. Furthermore, the findings reveal disparities in experiences and outcomes across firm and owner demographics, including race and ethnicity, industry, and firm size.

Overall, firms' financial conditions declined sharply and those owned by people of color reported greater challenges. The most important anticipated financial challenge differed by race and ethnicity of the owners. Among the findings for employer firms relevant to discriminatory barriers were the following:

- For Black-owned firms, credit availability was the top expected challenge, while Asian-owned firms disproportionately cited weak demand.
- The share of firms in fair or poor financial conditions varied by race: 79% of Asian-owned firms, 77% of Black-owned firms, 66% of Hispanic-owned firms and 54% of White-owned firms reported this result.
- The share of firms that received all the financing sought to address the impacts of the pandemic varied by race: 40% of White-owned firms received all the funding sought, but only 31% of Asian-owned firms, 20% of Hispanic-owned firms and 13% of Black-owned firms achieved this outcome.

b. 2018 Small Business Credit Survey

The 2018 SBCS²¹⁷ focused on minority-owned firms. The analysis was divided into two types: employer firms and non-employer firms.

i. Employer firms

Queries were submitted to businesses with fewer than 500 employees in the third and fourth quarters of 2018. Of the 7,656 firms in the unweighted sample, five percent were Asian, ten percent were Black, six percent were Hispanic, and 79% were White. Data were then weighted by number of employees, age, industry, geographic location (census division and urban or rural location), and minority status to

^{217.} Small Business Credit Survey, https://www.fedsmallbusiness.org/survey/2017/report-on-minority-owned-firms.

ensure that the data is representative of the nation's small employer firm demographics.²¹⁸

Among the findings for employer firms relevant to discriminatory barriers were the following:

- Not controlling for other firm characteristics, fewer minorityowned firms were profitable compared to non-minority-owned firms during the past two years.²¹⁹ On average, minority-owned firms and non-minority-owned firms were about as likely to be growing in terms of number of employees and revenues.²²⁰
- Black-owned firms reported more credit availability challenges or difficulties obtaining funds for expansion—even among firms with revenues of more than \$1M. For example, 62% of Black-owned firms reported that obtaining funds for expansion was a challenge, compared to 31% of White-owned firms.²²¹
- Black-owned firms were more likely to report relying on personal funds of owner(s) when they experienced financial challenges to fund their business. At the same time, White- and Asian-owned firms reported higher debt levels than Black- and Hispanic-owned firms.²²²
- Black-owned firms reported more attempts to access credit than White-owned firms but sought lower amounts of financing. Forty percent of Black-owned firms did not apply because they were discouraged, compared to 14% of White-owned firms.²²³
- Low credit score and lack of collateral were the top reported reasons for denial of applications by Black- and Hispanic-owned firms.²²⁴

ii. Non-employer firms²²⁵

Queries were submitted to non-employer firms in the third and fourth quarters of 2018. Of the 4,365 firms in the unweighted sample, five percent were Asian, 24% were Black, seven percent were Hispanic, and

- 221. *Id*. at 5.
- 222. *Id.* at 6.
- 223. *Id.* at 9.224. *Id.* at 15.
- 224. *Id.* at 13. 225. *Id.* at 18.

^{218.} *Id* at 22. Samples for SBCS are not selected randomly. To control for potential biases, the sample data are weighted so that the weighted distribution of firms in the SBCS matches the distribution of the small firm population in the United States by number of employees, age industry, geographic location, gender of owner, and race or ethnicity of owners.

^{219.} *Id*. at 3.

^{220.} *Id*. at 4.

64% were White. Data were then weighted by age, industry, geographic location (census division and urban or rural location), and minority status.²²⁶

Among the findings for non-employer firms relevant to discriminatory barriers were the following:

- Black-owned firms were more likely to operate at a loss than other firms.²²⁷
- Black-owned firms reported greater financial challenges, such as obtaining funds for expansion, accessing credit and paying operating expenses than other businesses.²²⁸
- Black- and Hispanic-owned firms submitted more credit applications than White-owned firms.²²⁹

c. 2016 Small Business Credit Surveys

The 2016 Small Business Credit Survey²³⁰ obtained 7,916 responses from employer firms with race/ethnicity information and 4,365 non-employer firms in the 50 states and the District of Columbia. Results were reported with four race/ethnicity categories: White, Black or African American, Hispanic, and Asian or Pacific Island²³¹er. It also reported results from womanowned small employer firms, defined as firms where 51% or more of the business is owned by women, and compared their experiences with maleowned small employer firms.

2. The 2016 Report on Minority-Owned Businesses²³²

The Report on Minority-Owned Businesses provided results for White-, Blackor African American-, Hispanic-, and Asian- or Pacific Islander-owned firms.

a. Demographics²³³

The SBCS found that Black-, Asian-, and Hispanic-owned firms tended to be younger and smaller in terms of revenue size, and they were concentrated

^{226.} *Id.* at 18.

^{227.} Id.

^{228.} *Id.* at 19.

^{229.} *Id.* at 20.

^{230.} https://www.fedsmallbusiness.org/survey/2017/report-on-minority-owned-firms.

^{231.} When the respondent sample size by race for a survey proved to be too small, results were communicated in terms of minority vis-à-vis non-minority firms.

^{232.} https://www.fedsmallbusiness.org/survey/2017/report-on-minority-owned-firms.

^{233. 2016} SBCS, at 2.

in different industries. Black-owned firms were concentrated in the healthcare and education industry sectors (24%). Asian-owned firms were concentrated in professional services and real estate (28%). Hispanic-owned firms were concentrated in non-manufacturing goods production and associated services industry, including building trades and construction (27%). White-owned firms were more evenly distributed across several industries but operated most commonly in the professional services industry and real estate industries (19%), and non-manufacturing goods production and associated services industry (18%).²³⁴

b. Profitability Performance Index²³⁵

After controlling for other firm characteristics, the SBCS found that fewer minority-owned firms were profitable compared to non-minority-owned firms during the prior two years. This gap proved most pronounced between White-owned (57%) and Black-owned firms (42%). On average, however, minority-owned firms and non-minority-owned firms were nearly as likely to be growing in terms of number of employees and revenues.

c. Financial and Debt Challenges/Demands²³⁶

The number one reason for financing was to expand the business or pursue a new opportunity. Eighty-five percent of applicants sought a loan or line of credit. Black-owned firms reported more attempts to access credit than White-owned firms but sought lower amounts of financing.

Black-, Hispanic-, and Asian-owned firms applied to large banks for financing more than they applied to any other sources of funds. Having an existing relationship with a lender was deemed more important to Whiteowned firms when choosing where to apply compared to Black-, Hispanicand Asian-owned firms.

The SBCS also found that small Black-owned firms reported more credit availability challenges or difficulties for expansion than White-owned firms, even among firms with revenues in excess of \$1M. Black-owned firm application rates for new funding were ten percentage points higher than White-owned firms; however, their approval rates were 19 percentage points lower. A similar but less pronounced gap existed between Hispanicand Asian-owned firms compared with White-owned firms. Of those approved for financing, only 40% of minority-owned firms received the

^{234.} *Id.* Forty-two percent of Black-owned firms, 21% of Asian-owned firms, and 24% of Hispanic-owned firms were smaller than \$100K in revenue size compared with 17% of White-owned firms.

^{235.} *Id*. at 3-4.

^{236.} *Id.* at 8-9; 11-12; 13; 15.

entire amount sought compared to 68% of non-minority-owned firms, even among firms with comparably good credit scores.

Relative to financing approval, the SBCS found stark differences in loan approvals between minority-owned and White-owned firms. When controlling for other firm characteristics, approval rates from 2015 to 2016 increased for minority-owned firms and stayed roughly the same for non-minority-owned firms. Hispanic- and Black-owned firms reported the highest approval rates at online lenders.²³⁷

Low credit score and lack of collateral were the top reported reasons for denial of Black- and Hispanic-owned firms' applications. Satisfaction levels were lowest at online lenders for both minority- and non-minority-owned firms. A lack of transparency was cited as one of the top reasons for dissatisfaction for minority applicants and borrowers.

Forty percent of non-applicant Black-owned firms reported not applying for financing because they were discouraged (expected not to be approved), compared with 14% of White-owned firms. The use of personal funds was the most common action taken in response to financial challenges, with 86% of Black-owned firms, 77% of Asian-owned firms, 76% of White-owned firms, and 74% of Hispanic-owned firms using this as its source.

A greater share of Black-owned firms (36%) and of Hispanic-owned firms (33%) reported existing debt in the past 12 months of less than \$100,000, compared with 21% of White-owned firms and 14% of Asian-owned firms. Black-owned firms applied for credit at a higher rate and tended to submit more applications, compared with 31% of White-owned firms. Black-, Hispanic-, and Asian-owned firms applied for higher-cost products and were more likely to apply to online lenders compared to White-owned firms.

d. Business Location Impact²³⁸

Controlling for other firm characteristics, minority-owned firms located in low-income minority zip codes reported better credit outcomes at large banks, compared with minority-owned firms in other zip codes. By contrast, at small banks, minority-owned firms located in low- and moderateincome minority zip codes experienced lower approval rates than minorityowned firms located in other zip codes.

^{237.} The share of minority-owned firms receiving at least some financing was lower across all financing products, compared with non-minority firms.

^{238.} *Id.* at 17.

e. Non-employer Firms²³⁹

Non-employer firms reported seeking financing at lower rates and experienced lower approval rates than employer firms, with Black-owned nonemployer firms and Hispanic-owned non-employer firms experiencing the most difficulty. White-owned non-employer firms experienced the highest approval rates for new financing, while Black-owned non-employer firms experienced the lowest approval rates for new financing.

3. The 2016 Report on Woman-Owned Businesses²⁴⁰

The Report on Woman-Owned Businesses provides results from womanowned small employer firms where 51% or more of the business is owned by women. These data compared the experience of these firms compared with male-owned small employer firms.

a. Firm Characteristics: Woman-Owned Firms Start Small and Remain Small and Concentrate in Less Capital-Intensive Industries²⁴¹

The SBCS found that 20% of small employer firms were woman-owned, compared to 65% male-owned and 15% equally owned. Woman-owned firms generally had smaller revenues and fewer employees than male-owned small employer firms. These firms tended to be younger than male-owned firms.

Woman-owned firms were concentrated in less capital-intensive industries. Two out of five woman-owned firms operated in the healthcare and education or professional services and real estate industries. Male-owned firms were concentrated in professional services, real estate, and non-manufacturing goods production and associated services.²⁴²

b. Profitability Challenges and Credit Risk Disparities²⁴³

Woman-owned firms were less likely to be profitable than male-owned firms. These firms were more likely to report being medium or high credit risk compared to male-owned firms. Notably, gender differences by credit risk were driven by woman-owned startups. Among firms older than five years, credit risk was indistinguishable by the owner's gender.

^{239.} *Id.* at 21.

^{240.} https://www.newyorkfed.org/medialibrary/media/smallbusiness/2016/SBCS-Report-WomenOwnedFirms-2016.pdf.

^{241. 2016} SBCS, at 1-5.

^{242.} Non-manufacturing goods production and associated services refers to firms engaged in Agriculture, Forestry, Fishing, and Hunting; Mining, Quarrying, and Oil and Gas Extraction; Utilities; Construction; Wholesale Trade; Transportation and Warehousing (NAICS codes: 11, 21, 22, 23, 42, 48-49).

^{243.} *Id.* at 6-7.

c. Financial Challenges During the Prior Twelve Months²⁴⁴

Woman-owned firms were more likely to report experiencing financial challenges in the prior twelve months: 64% compared to 58% of male-owned firms. They most frequently used personal funds to fill gaps and make up deficiencies. Similar to male-owned firms, woman-owned firms frequently funded operations through retained earnings. Ninety percent of woman-owned firms relied upon the owner's personal credit score to obtain financing.

d. Debt Differences²⁴⁵

Sixty-eight percent of woman-owned firms had outstanding debt, similar to that of male-owned firms. However, woman-owned firms tended to have smaller amounts of debt, even when controlled for the revenue size of the firm.

e. Demands for Financing²⁴⁶

Forty-three percent of woman-owned firms applied for financing. Womanowned applicants tended to seek smaller amounts of financing even when their revenue size was comparable.

Overall, woman-owned firms were less likely to receive all financing applied for compared to male-owned firms. Woman-owned firms received a higher approval rate for U.S. Small Business Administration loans compared to male-owned firms. Low-credit, woman-owned firms were less likely to be approved for business loans than their male counterparts with similar credit (68% compared to 78%).

f. Firms That Did Not Apply for Financing²⁴⁷

Woman-owned firms reported being discouraged from applying for financing for fear of being turned down at a greater rate: 22% compared to 15% for male-owned firms. Woman-owned firms cited low credits scores more frequently than male-owned firms as their chief obstacle in securing credit. By contrast, male-owned businesses were more likely to cite performance issues.

^{244.} *Id.* at 8.

^{245.} *Id*. at 10.

^{246.} *Id*. at 16.

^{247.} *Id*. at 14.

g. Lender Satisfaction²⁴⁸

Woman-owned firms were most consistently dissatisfied by lenders' lack of transparency and by long waits for credit decisions. However, they were notably more satisfied with their borrowing experiences at small banks rather than large ones.

4. 2021 Report on Firms Owned by People of Color

a. Overview

The 2021 Report on Firms Owned by People of Color²⁴⁹ compiles results from the 2020 SBCS. The SBCS provides data on small business performance, financing needs, and decisions and borrowing outcomes.^{250,251} The Report provides results by four race/ethnicity categories: White, Black or African American, Hispanic or Latino, and Asian or Pacific Islander. For select key statistics, it also includes results for 4,531 non-employer firms, which are firms with no employees on payroll other than the owner(s) of the business.

Patterns of geographic concentration emerged among small business ownership by race and ethnicity. This was important given the progressive geographic spread of the novel coronavirus throughout 2020 and variations in state government responses to limit its spread. The Report found that 40% of Asian-owned small employer firms are in the Pacific census division, and another 28% are in the Middle Atlantic. Early and aggressive efforts by the impacted states may have affected the revenue performance of Asianowned firms in the aggregate given their geographic concentration. Blackowned and Hispanic-owned small employer firms are more concentrated in the South Atlantic region, which includes states with a mix of pandemic responses. For example, while Florida lifted COVID-19 restrictions relatively quickly, the South Atlantic, including North Carolina, maintained more strict guidelines.

The *Report* found that firms owned by people of color continue to face structural barriers in acquiring the capital, business acumen, and market access needed for growth. At the time of the 2020 SBCS – six months after the onset of the global pandemic – the U.S. economy had undergone a sig-

^{248.} *Id*. at 26.

^{249.} https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color.

^{250.} The SBCS is an annual survey of firms with fewer than 500 employees.

^{251.} The 2020 SBCS was fielded in September and October 2020 and yielded 9,693 responses from small employer firms in all 50 states and the District of Columbia.

nificant contraction of economic activity. As a result, firms owned by people of color reported more significant negative effects on business revenue, employment, and operations. These firms anticipated revenue, employment, and operational challenges to persist into 2021 and beyond. Specific findings are, as follows:

b. Performance and Challenges

Overall, firms owned by people of color were more likely than Whiteowned firms to report that they reduced their operations in response to the pandemic. Asian-owned firms were more likely than others to have temporarily closed and to have experienced declines in revenues and employment in the 12 months prior to the survey. In terms of sales and the supply chain, 93% of Asian-owned firms and 86% of Black-owned firms reported sales declines as a result of the pandemic. Relative to financial challenges for the prior 12 months, firms owned by people of color were more likely than White-owned firms to report financial challenges, including paying operating expenses, paying rent, making payments on debt, and credit availability. Black-owned business owners were most likely to have used personal funds in response to their firms' financial challenges. Nearly half of Black-owned firms reported concerns about personal credit scores or the loss of personal assets. By contrast, one in five White-owned firms reported no impact on the owners' personal finances. Asian-owned firms were approximately twice as likely as White-owned firms to report that their firms were in poor financial condition.

c. Emergency Funding

The *Report* finds that PPP loans were the most common form of emergency assistance funding that firms sought during the period. Black-owned and Hispanic-owned firms were less likely to apply for a PPP loan. Only six in ten Black-owned firms actually applied. Firms owned by people of color were more likely than White-owned firms to report that they missed the dead-line or were unaware of the program. Firms owned by people of color were less likely than White-owned firms to use a bank as a financial services provider. Regardless of the sources at which they applied for PPP loans, firms that used banks were more likely to apply for PPP loans than firms that did not have a relationship with a bank. While firms across race and ethnicity were similarly likely to apply for PPP loans at large banks, White- and Asian-owned firms more often applied at small banks than did Black- and Hispanic-owned firms. Black-owned firms were nearly half as likely as White-owned firms to receive all of the PPP funding they sought and were approximately five times as likely to receive none of the funding they sought.

d. Debt and Financing

Black-owned firms have smaller amounts of debt than other firms. About one in ten firms owned by people of color do not use financial services.

On average, Black-owned firms completed more financing applications than other applicant firms. Firms owned by people of color turned more often to large banks for financing. By contrast, White-owned firms turned more often to small banks. Black-owned applicant firms were half as likely as White-owned applicant firms to be fully approved for loans, lines of credit, and cash advances.

Firms owned by people of color were less satisfied than White-owned firms with the support from their primary financial services provider during the pandemic. Regardless of the owner's race or ethnicity, firms were less satisfied with online lenders than with banks and credit unions.

In the aggregate, 63% of all employer firms were non-applicants – they did not apply for non-emergency financing in the prior 12 months. Blackowned firms were more likely than other firms to apply for non-emergency funding in the 12 months prior to the survey. One-quarter of Black- and Hispanic-owned firms that applied for financing sought \$25,000 or less. In 2020, firms owned by people of color were more likely than White-owned firms to apply for financing to meet operating expenses. The majority of non-applicant firms owned by people of color needed funds but chose not to apply, compared to 44% of White-owned firms. Financing shortfalls were most common among Black-owned firms and least common among Whiteowned firms.

Firms of color, and particularly Asian-owned firms, were more likely than White-owned firms to have unmet funding needs. Just 13% of Black-owned firms received all of the non-emergency financing they sought in the 12 months prior to the survey, compared to 40% of White-owned firms. Blackowned firms with high credit scores were half as likely as their White counterparts to receive all of the non-emergency funding they sought.

e. Findings for Non-employer Firms

Non-employer firms, those that have no paid employees other than the owner, represent the overwhelming majority of small businesses across the nation. In all, 96% of Black- and 91% of Hispanic-owned firms are non-employer firms, compared to 78% of White-owned and 75% of Asian-owned firms.²⁵²

^{252.} The Report notes that a future report will describe findings from the 2020 SBCS for non-employers in greater detail.

Compared to other non-employer firms, Asian-owned firms reported the most significant impact on sales as a result of the pandemic. They were most likely to report that their firm was in poor financial condition at the time of the survey.

Compared to other non-employer firms that applied for financing, Blackowned firms were less likely to receive all of the financing they sought. Black-owned non-employer firms that applied for PPP loans were less likely than other firms to apply at banks and more often turned to online lenders. Among PPP applicants, White-owned non-employer firms were twice as likely as Black-owned firms to receive all of the PPP funding they sought.

5. 2020 Small Business Administration Loans to African American Businesses

As detailed in a 2021 article published in the *San Francisco Business Times*,²⁵³ the number of loans to Black businesses through the SBA's 7(a) program²⁵⁴ decreased 35% in 2020.²⁵⁵ This was the largest drop in lending to any race or ethnic group tracked by the SBA. The 7(a) program is the SBA's primary program for financial assistance to small businesses. Terms and conditions, like the guaranty percentage and loan amount, vary by the type of loan. Lenders and borrowers can negotiate the interest rate, but it may not exceed the SBA maximum.²⁵⁶

Bankers, lobbyists, and other financial professionals attributed the 2020 decline to the impact of the PPP pandemic relief effort.²⁵⁷ The PPP loan program provided the source of relief to underserved borrowers through a direct incentive for small businesses to keep their workers on payroll.²⁵⁸ Approximately 5.2M PPP loans were made in 2020, as compared with roughly 43,000 loans made through the 7(a) program.

^{253.} SBA Loans to African American Businesses Decrease 35%, San Francisco Business Times (August 11, 2021) at: https:// www.bizjournals.com/sanfrancisco/news/2021/08/11/sba-loans-to-african-american-businesses-decrease.html. Data were obtained through a Freedom of Information Act request.

^{254.} Section 7(a) of the Small Business Act of 1953 (P.L. 83-163, as amended).

^{255.} The total number of 7(a) loans declined 24%.

^{256.} The SBA caps the maximum spread lenders can charge based on the size and maturity of the loan. Rates range from prime plus 4.5% to prime plus 6.5%, depending on how much is borrowed.

^{257.} The Coronavirus Act, Relief, and Economic Security Act ("CARES Act"), required the SBA to issue guidance to PPP lenders to prioritize loans to small businesses owned by socially and economically disadvantaged individuals including Black-owned businesses. *See* 116-136, §1, March 27, 2020, 134 Stat. 281.

^{258.} PPP loans were used to help fund payroll costs, including benefits, and to pay for mortgage interest, rent, utilities, workers protection costs related to COVID-19, uninsured property damage costs caused by looting or vandalism during 2020 as well as certain supplier costs and operational expenses.

In a published statement to the *Portland Business Journal*, the American Bankers Association, an industry trade group, noted that the 2020 decline in SBA 7(a) loans to Black-owned businesses is not a one-year anomaly; it has been declining for years at a much faster rate than 7(a) loans to other borrowers. The 2020 data²⁵⁹ reveal that the number of SBA loans made annually to Black businesses has declined 90% since a 2007 peak, more than any other group tracked by the SBA. In that interval, the overall number of loans decreased by 65%.

The nation's four largest banks (JP Morgan Chase, Bank of America, Citigroup, and Wells Fargo), which hold roughly 35% of national deposits, made 41% fewer SBA 7(a) loans to Blacks in 2020.²⁶⁰

PPP loans served as a lifeline during the pandemic for millions of businesses. However, industry experts maintained that PPP loans detracted from more conventional SBA lending efforts that year. Wells Fargo provided more than 282,000 PPP loans to small businesses nationwide in 2020, with an average loan size of \$50,000. Wells Fargo, the most active lender for Black businesses nationwide in 2020, saw its SBA loans to Blacks drop from 263 in 2019 to 162 in 2020. Bank of America, Chase, and Citigroup also reported fewer SBA loans to African American businesses in 2020.

While PPPs have been heralded for providing needed monies to distressed small and mid-size businesses, data reveals disparities in how loans were distributed.²⁶¹ An analysis in 2020 by the *Portland Business Journal*, found that of all 5.2M PPP loans, businesses in neighborhoods of color received fewer loans and delayed access to the program during the early critical days of the pandemic.²⁶² More recent analysis released by the Associated Press indicates that access for borrowers of color improved exponentially during the later rounds of PPP funding, following steps designed to make the program more accessible to underserved borrowers.

^{259.} The SBA denied the original request for information; however, the publication prevailed on appeal.

^{260.} Data obtained by the Business Journal does not include information from lenders who made less than ten loans in 2020.

^{261.} While PPP loans are administered by the SBA, they are disbursed primarily through banks.

^{262.} Many industry experts have observed that businesses that already had strong relationships with lenders were the most successful in accessing PPP loans. The nation's long history of systemic racism in banking fostered disparities in PPP loan distribution. See Alicia Plerhoples, Correcting Past Mistakes: PPP Loans and Black-Owned Small Businesses, at https://www.acslaw.org/expertforum/correcting-past-mistakes-ppp-loans-and-black-owned-small-businesses/.

a. 2010 Minority Business Development Agency Report²⁶³

The 2010 Minority Business Development Agency Report, "Disparities in Capital Access Between Minority and non-Minority Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs", summarizes results from the Kauffman Firm Survey, data from the U.S. Small Business Administration's Certified Development Company/504 Guaranteed Loan Program and additional extensive research on the effects of discrimination on opportunities for minority-owned firms. The report found that:

low levels of wealth and liquidity constraints create a substantial barrier to entry for minority entrepreneurs because the owner's wealth can be invested directly in the business, used as collateral to obtain business loans or used to acquire other businesses.²⁶⁴

It also found, "the largest single factor explaining racial disparities in business creation rates are differences in asset levels."²⁶⁵

Some additional key findings of the Report include:

- *Denial of Loan Applications*. Forty-two percent of loan applications from minority firms were denied compared to 16% of loan applications from non-minority-owned firms.²⁶⁶
- Receiving Loans. Forty-one percent of all minority-owned firms received loans compared to 52% of all non-minority-owned firms. MBEs are less likely to receive loans than non-minority-owned firms regardless of firm size.²⁶⁷
- *Size of Loans*. The size of the loans received by minority-owned firms averaged \$149,000. For non-minority-owned firms, loan size averaged \$310,000.
- Cost of Loans. Interest rates for loans received by minority-owned firms averaged 7.8%. On average, non-minority-owned firms paid 6.4% in interest.²⁶⁸

268. Id.

^{263.} Robert W. Fairlie and Alicia Robb, Disparities in Capital Access Between Minority and non-Minority Businesses: The Troubling Reality of Capital Limitations Faced by MBEs, Minority Business Development Agency, U.S. Department of Commerce, 2010 ("MBDA Report" (https://archive.mbda.gov/sites/mbda.gov/files/migrated/files-attachments/ DisparitiesinCapitalAccessReport.pdf).

^{264.} *Id.* at 17.

^{265.} *Id.* at 22.

^{266.} *Id*. at 5.

^{267.} Id.

• Equity Investment. The equity investments received by minorityowned firms were 43% of the equity investments received by nonminority-owned firms even when controlling for detailed business and owner characteristics. The differences are large and statistically significant. The average amount of new equity investments in minority-owned firms receiving equity is 43% of the average of new equity investments in non-minority-owned firms. The differences were even larger for loans received by high sales firms.²⁶⁹

b. Federal Reserve Board Surveys of Small Business Finances

The Federal Reserve Board and the U.S. Small Business Administration have conducted surveys of discrimination in the small business credit market for years 1993, 1998 and 2003.²⁷⁰ These Surveys of Small Business Finances are based on a large representative sample of firms with fewer than 500 employees. The main finding from these Surveys is that MBEs experience higher loan denial probabilities and pay higher interest rates than White-owned businesses, even after controlling for differences in credit worthiness and other factors. Blacks, Hispanics and Asians were more likely to be denied credit than Whites, even after controlling for firm characteristics like credit history, credit score and wealth. Blacks and Hispanics were also more likely to pay higher interest rates on the loans they did receive.²⁷¹

6. Other Reports

- Dr. Timothy Bates found venture capital funds focusing on investing in minority firms provide returns that are comparable to mainstream venture capital firms.²⁷²
- According to the analysis of the data from the Kauffman Firm Survey, minority-owned firms' investments into their own firms were about 18% lower in the first year of operations compared to those of non-minorityowned firms. This disparity grew in the subsequent three years of operations, where minorities' investments into their own firms were about 36% lower compared to those of non-minority-owned firms.²⁷³

^{269.} Id.

^{270.} https://www.federalreserve.gov/pubs/oss/oss3/nssbftoc.htm. These surveys have been discontinued. They are referenced to provide some historical context.

^{271.} See Blanchflower, D. G., Levine. P. and Zimmerman, D., "Discrimination In The Small Business Credit Market," Review of Economics and Statistics, (2003); Cavalluzzo, K. S. and Cavalluzzo, L. C. ("Market structure and discrimination, the case of small businesses," Journal of Money, Credit, and Banking, (1998).

^{272.} See Bates, T., "Venture Capital Investment in Minority Business," Journal of Money Credit and Banking 40, 2-3 (2008).

^{273.} Fairlie, R.W. and Robb, A, Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States, (Cambridge: MIT Press, 2008.

• Another study by Fairlie and Robb found minority entrepreneurs face challenges (including lower family wealth and difficulty penetrating financial markets and networks) directly related to race that limit their ability to secure financing for their businesses.²⁷⁴

F. Evidence of Disparities in Access to Human Capital

There is a strong intergenerational correlation with business ownership. The probability of self-employment is significantly higher among the children of the selfemployed. A generational lack of self-employment capital disadvantages minorities, whose earlier generations were denied business ownership through either *de jure* segregation or *de facto* exclusion.

There is evidence that current racial patterns of self-employment are in part determined by racial patterns of self-employment in the previous generation.²⁷⁵ Black men have been found to face a "triple disadvantage" in that they are less likely than White men to: 1. Have self-employed fathers; 2. Become self-employed if their fathers were not self-employed; and 3. To follow their fathers into self-employment.²⁷⁶

Intergenerational links are also critical to the success of the businesses that do form.²⁷⁷ Working in a family business leads to more successful firms by new owners. One study found that only 12.6% of Black business owners had prior work experiences in a family business as compared to 23.3% of White business own-

ers.²⁷⁸ This creates a cycle of low rates of minority ownership and worse outcomes being passed from one generation to the next, with the corresponding perpetuation of advantages to White-owned firms.

Similarly, unequal access to business networks reinforces exclusionary patterns. The composition and size of business networks are associated with self-employment rates.²⁷⁹ The U.S. Department of Commerce has reported that the ability to form strategic alliances with other firms is important for success.²⁸⁰ Minorities

^{274.} *Id*.

^{275.} Fairlie, R W., "The Absence of the African-American Owned Business, An Analysis of the Dynamics of Self-Employment," *Journal of Labor Economics*, Vol. 17, 1999, pp 80-108.

^{276.} Hout, M. and Rosen, H. S., "Self-employment, Family Background, and Race," *Journal of Human Resources*, Vol. 35, No. 4, 2000, pp. 670-692.

Fairlie, R.W. and Robb, A., "Why Are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital," *Journal of Labor Economics*, Vol. 24, No. 2, 2007, pp. 289-323.
 Id.

^{279.} Allen, W. D., "Social Networks and Self-Employment," *Journal of Behavioral and Experimental Economics (formerly The Journal of Socio-Economics)*, Vol. 29, No. 5, 2000, pp. 487-501.

^{280. &}quot;Increasing MBE Competitiveness through Strategic Alliances" (Minority Business Development Agency, 2008).

and women in our interviews reported that they felt excluded from the networks that help to create success in their industries.

G. Conclusion

The economy-wide data, taken as a whole, paint a picture of systemic and endemic inequalities in the ability of firms owned by minorities and women to have full and fair access to Charlotte's contracts and associated subcontracts. This evidence supports the conclusion that absent the use of narrowly tailored contract goals, the disparate economy-wide impacts experienced by M/WBEs exacerbate unequal access to contracting opportunities. City of Charlotte Disparity Study 2022

VI. QUALITATIVE EVIDENCE OF RACE AND GENDER BARRIERS IN THE CITY OF CHARLOTTE'S MARKET

In addition to quantitative data, a disparity study should further explore anecdotal evidence of experiences with discrimination in contracting opportunities. This evidence is relevant to the question of whether despite the successful operations of the City of Charlotte's Charlotte Business INClusion ("CBI") Program, M/WBEs continue to face discriminatory barriers to their full and fair participation in City opportunities. Anecdotal evidence also sheds light on the likely efficacy of using only race-neutral and gender-neutral remedies designed to benefit all small contractors and to combat discrimination and achieve the objectives of the CBI Program. As discussed in the Legal Chapter, this type of anecdotal data has been held by the courts to be relevant and probative of whether an agency continues to have a need to use narrowly tailored M/WBE contract goals to remedy the effects of past and current discrimination and create a level playing field for contract opportunities for all firms.

The Supreme Court has held that anecdotal evidence can be persuasive because it "brought the cold [statistics] convincingly to life."²⁸¹ Evidence about discriminatory practices engaged in by prime contractors, agency personnel, and other actors relevant to business opportunities has been found relevant regarding barriers both to minority firms' business formation and to their success on governmental projects.²⁸² The courts have held that while anecdotal evidence is insufficient standing alone, "[p]ersonal accounts of actual discrimination or the effects of discriminatory practices may, however, vividly complement empirical evidence. Moreover, anecdotal evidence of a [government's] institutional practices that exacerbate discriminatory market conditions are [sic] often particularly probative."²⁸³ "[W]e do not set out a categorical rule that every case must rise or fall entirely on the sufficiency of the numbers. To the contrary, anecdotal evidence might make the pivotal difference in some cases; indeed, in an exceptional case, we do not rule out the possibility that evidence not reinforced by statistical evidence, as such, will be enough."²⁸⁴

^{281.} International Brotherhood of Teamsters v. United States, 431 U.S. 324, 399 (1977).

^{282.} Adarand Constructors, Inc. v. Slater, 228 F.3d 1147, 1168-1172 (10th Cir. 2000), cert. granted, 532 U.S. 941, then dismissed as improvidently granted, 534 U.S. 103 (2001).

^{283.} Concrete Works of Colorado, Inc. v. City and County of Denver, 36 F.3d 1513, 1120, 1530 (10th Cir. 1994).

There is no requirement that anecdotal testimony be "verified" or corroborated, as befits the role of evidence in legislative decision-making, as opposed to judicial proceedings. In finding the State of North Carolina's Historically Underutilized Business program to be constitutional, the Fourth Circuit Court of Appeals opined that "[p]lain-tiff offers 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—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' perception."²⁸⁵ Likewise, the Tenth Circuit held that "Denver was not required to present corroborating evidence and [plaintiff] was free to present its own witnesses to either refute the incidents described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry."²⁸⁶

To explore this type of anecdotal evidence of possible discrimination against minorities and women in the City's geographic and industry markets and the effectiveness of its current race-conscious and race-neutral measures, we conducted six small group and individual business owner and stakeholder interviews, totaling ninety-three (93) participants. We also received written comments. We met with a broad cross section of business owners from the City's geographic and industry markets. Firms ranged in size from large, long established prime contracting and consulting firms to new market entrants. We sought to explore their experiences in seeking and performing public sector prime contracts and subcontracts with the City of Charlotte, other government agencies, and in the private sector. We also elicited recommendations for improvements to the CBI Program.

Many minority and woman owners reported that while some progress has been made in integrating their firms into public and private sector contracting opportunities through race-conscious and gender-conscious contracting programs like the City's, significant barriers on the basis of race and/or gender remain.

In addition to the group interviews, we conducted an electronic survey of firms in the City's market area about their experiences in obtaining work, marketplace conditions and the City's CBI Program. One-hundred and ninety-eight (198) minority and female recipients responded to the survey. The results were similar to those of the interviews. Among minority-owned and woman-owned firms, almost a third (31.2%) reported that they still experience barriers to equal contracting opportunities; 24.4% said their competency was questioned because of their race or gender; and 14.0% indicated they had experienced job-related sexual or racial harassment or stereotyping.

^{284.} Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 926 (11th Cir. 1997).

^{285.} H.B. Rowe Co., Inc. v. Tippett, 615 F.3d 233, 249 (4th Circ. 2010).

^{286.} Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950, 989 (10th Cir. 2003), cert. denied, 540 U.S. 1027 (2003).

A. Business Owner Interviews

The following are summaries of the issues discussed. Quotations are indented and may have been shortened for readability. The statements are representative of the views expressed by numerous participants.

1. Discriminatory Attitudes and Negative Perceptions of Competence

Many minority and woman interview participants reported that they still encounter biases, stereotypes and negative assumptions about their qualifications and competency. Several owners reported that being certified as an M/ WBE often carries a stigma.

We were called the token sub-contractor.... We came in for a pre-construction conference. And the gentleman that owned the company sat down with us and he said, "I just want to make it clear. We don't want you here. Also, the client doesn't want you here."

We were told on that particular [airport] job that they don't know why we were working so hard and following the contract so much to a T because we weren't going to finish the job anyway. And this actually came out of a federal government employee's mouth, that we weren't going to finish the job anyway.

There was a stigma like [name] just mentioned, where people assume that because we were a Black contractor, we didn't know what we were doing and I've worked for some worldwide companies in my previous life, done billions of dollars of work and know the business well. I've been in the industry since 1984.

I do feel in the year that I have been MBE-certified, that I am looked upon differently. When they do learn I am MBE, price becomes a big thing, capabilities I have to go through some gatekeepers that my other competitors don't have to go through.

I have an accent, so there's really a reluctance and also thinking, "Oh, well, these people, how are they going to do the job?"

We, as minority, has always had to prove ourselves before we would even get a break anyway. And then once you get that break, you got to prove yourself over and over and over....

We've been kicked around all our life. So let me know when it stops.

Some entrepreneurs stated that they persevere through negative attitudes.

There's nothing we can do about this, except that's it. I need to forget all that stigma, or maybe that stereotype and just work what I can do, what best and just move on.

One woman reported that once other business people get to know her and her capabilities, the barriers are eliminated.

Once they see that you know what you're talking about, then they'll do what they're supposed to do.

2. Exclusion from Industry Networks

Some M/WBEs found it difficult to penetrate the industry networks necessary for entrepreneurial success.

It takes me more work to expose myself and to prove to people.

3. Hostile Work Environments

Some minority owners had suffered blatantly hostile environments on the basis of race.

There was a lot of just blatant acts of really just sabotage, not the usual stuff. Non-payment, not getting paperwork back timely. Job, we did in North Charlotte, we actually experienced the contractor that we were working for decided to paint the word turds on our equipment, because we were the DBE and I've got pictures and letters of all this stuff. Our employees have been physically hazed. We actually got some temporary laborers from a local labor company. And because of the treatment that they experienced on the job by the contractor and by DOT employees, they actually terminated our relationship because they provided written statements to their employer, the temp agency, and as well as to us. And they identified everyone that conducted themselves in that manner because it was a federally funded job in DOT. Everybody had badges on. So, there was no mistakes about who was behind the behavior because everyone was identified.

One of the reasons I had to leave the corporate giant that I was working for was because of how I saw them treating minority

contractors and me being associated with that and having to look at these people in the community every day and know that I'm part of an organization that perpetuates hate and financial lynching towards minority businesses.

If you want things to change, you better bleach your skin.

Several women, especially in construction, had experienced sexist attitudes and behaviors.

It's usually more of the smaller [construction firms], but especially if I go into a place I walk into a bid meeting, or I walk into a meeting to meet with a new customer, potential customer, there are a lot of looks in eyes and people don't believe that I know what I'm talking about.... I get a lot of side eyes and underneath breath remarks and things of that nature. And, I'm at this point unfortunately being young as I am, I'm already used to this situation.

I've also had instances where they would make derogatory statements because I was female and I'm cleaning the unit. So, I'm bending over or squatting down. And they're saying these things and I let it roll off in my back because I know ignorance.

Unfortunately, every appointment I have to take my foreman, then they would see, "Okay, we can trust because this is a man." But they don't do anything. All the work I do it myself. They do the labor, but they don't do all the designs, all the planning and everything. Sometimes it's very frustrating, but I still have to accept it.... When they see a man, they really think that, "Okay, he can do the job, but you cannot do it."... We have to work as women, as an immigrant, a lot more on customer service. Even if we do, we have to do an excellent job. And you still have to have a little bit of bias in the relationship.

For me, a minority woman with her own business, but it's an all male-dominated [construction] industry that I'm in. So, of course. But they found out pretty fast that I knew what I was talking about, and I wasn't going to take it.

If I am put in a sub opportunity and I'm surrounded by sexual innuendo, or some other uncomfortable workplace situations, there's no outlet for me. And if I complain about it, now I'm problematic. Or I may not be looked at again by that particular prime, or that particular prime continues to get opportunities. And I'm the one that's pushed out of the way. And then there's definitely no transparency in that discussion either.

That fact that I'm a woman business owner has held me back in so many capacities.... And when I'm able to see, as a White person, opportunities that are given to me because of relationships as [name] just mentioned, then that even exacerbates the need for programs like this. So, I benefit in one capacity, and then I'm held back in another capacity because of my gender.

B. Anecdotal Survey of Charlotte Area Firms

To supplement the in-person interviews, we also conducted an anecdotal, electronic survey of firms on our Master M/WBE Directory; prime firms on the contract data file; and firms identified through our outreach efforts. We further solicited written comments. The survey was comprised of up to forty-five (45) closed-ended and open-ended questions and replicated the topics discussed in the business owner interviews. Questions focused on doing business in the City's market area, specifically barriers and negative perceptions, access to networks, information and experiences in obtaining work, and capacity development, as well as the City's M/WBE program.

The survey was emailed to 13,214 firm representatives and owners, five (5) times from July 12, 2021, to August 16, 2021. The response period closed on August 31, 2021.

Eight-hundred and eight-five (885) gross responses were received. After accounting for incomplete and non-relevant responses, usable responses equaled fourhundred and ninety (490) for a net response rate of 3.7%. Three-hundred and ninety-four (394) minority-owned and woman-owned firms and ninety-six (96) publicly held and non-M/WBEs completed the survey. This represents a 3.0% net response rate among minority-owned and woman-owned firms and a 0.7% net response rate for publicly held and non-M/WBEs.²⁸⁷

1. Respondents' Profiles

Table 6-1: The race and gender distribution of minority and woman survey respondents is listed below. Construction-related firms accounted for 18.3%, architecture, engineering and surveying firms accounted for 5.6%, professional services firms accounted for 21.1%, other services firms accounted for 38.8% and goods and supply firms accounted for 16.0% of the responses.

^{287.} Percentage results have been rounded to one decimal place to increase readability.

Firm Ownership	Construction Related	Architecture, Engineering and Surveying	Professional Services	Goods, Supplies and Other Services	Total
African American	40	7	59	28	229
Hispanic	8	2	6	8	24
Asian Pacific/ Subcontinent Asian American	3	1	1	9	14
Native American/ Alaska Native	3	1	2	1	7
Non-Minority Women	18	11	16	75	120
DBE Total	72	22	84	216	394
Publicly Held, Non- M/W/DBE Total	38	9	11	38	96
Respondents Total	110	31	95	254	490

Table 6-1: Distribution of Industry and Race and Gender of Survey Respondents

Chart 6-1: Respondent Type of Work

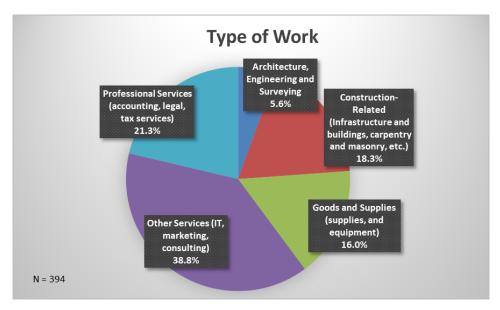


Chart 6-2: Among M/WBEs, 12.2% of the firms had worked on City of Charlotte projects only as a prime contractor or consultant; 16.26% had worked only as a subcontractor; 7.4% had worked as both a prime contractor or consultant and as a subcontractor or subconsultant; and 64.2% had not done business with the City. Half (50.0%) of the minority-owned and woman-owned firms were

certified with the City of Charlotte as an MBE, WBE and/or SBE. A little over half (53.0%) were certified with other government agencies, primarily the Historically Underutilized Business certification by the State of North Carolina.

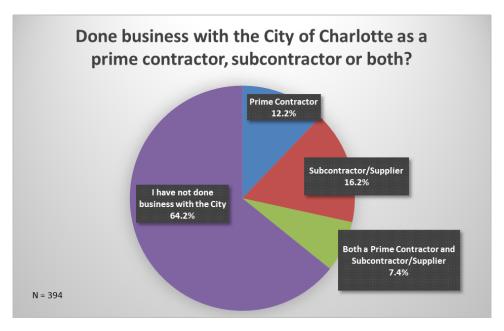


Chart 6-2: Respondent Contractor Status with the City of Charlotte

Chart 6.3: Fifty-six percent of the respondents reported that some of their revenue was derived from government work. Twenty-eight percent of the firms reported that up to 25% was from government contracts; ten percent reported between 25% and 50%; seven percent reported between 51% and 75%; and eleven percent reported between 76% and 100%. Government work did not contribute to the gross revenue of 44% of the firms.

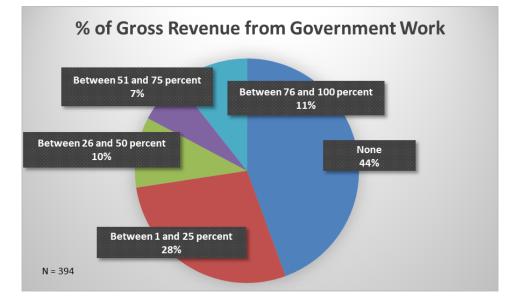


Chart 6-3: Respondent Contractor Revenue from Government Work

2. Discriminatory Barriers and Perceptions

Chart 6-4: A little under one-third (31.2%) of the respondents reported that they experience barriers to contracting opportunities based on their race and/ or gender.

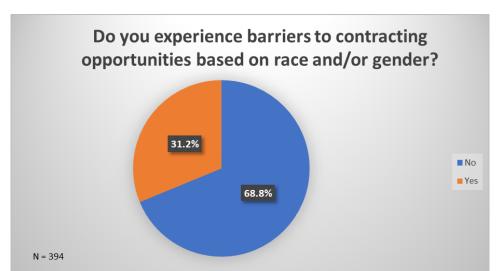


Chart 6-4: Barriers to Contracting Opportunities Based on Race and Gender

Chart 6-5: Almost one-quarter (24.4%) answered yes to the question "Is your competency questioned based on your race and/or gender?".

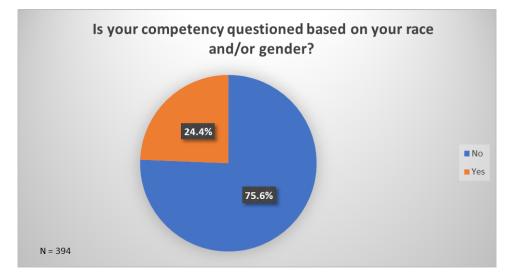


Chart 6-5: Negative Perception of Competency Based on Race or Gender

Chart 6-6: Fourteen percent indicated that they had experience job-related sexual or racial harassment or stereotyping.

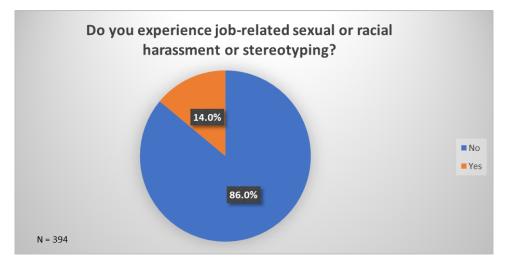


Chart 6-6: Industry-Related Sexual or Racial Harassment or Stereotyping

Chart 6-7: Discrimination from suppliers or subcontractors because of their race and/or gender was experienced by 19.3% of the respondents.

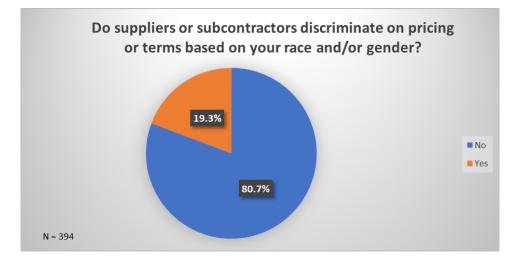


Chart 6-7: Supplier Pricing and Terms Discrimination Based on Race and Gender

3. Access to Formal/Informal Business and Professional Networks

Chart 6-8: Almost one third (30.5%) of M/WBE respondents reported that they did not have equal access to the same information as non-certified firms in their industry.



Chart 6-8: Access to the Same Information as Non-Certified Firms

Chart 6-9: Almost one quarter (23.4%) of M/WBE respondents indicated that they do not have access to informal and formal networking information.

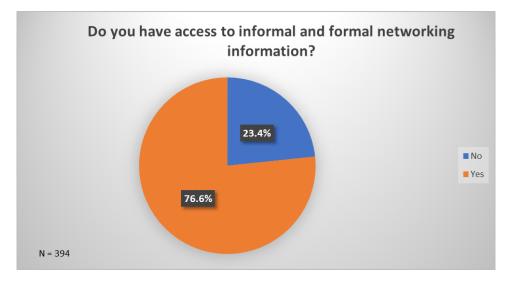


Chart 6-9: Access to Informal and Formal Networking Information

4. Access to Financial Supports

Chart 6-10: Among M/WBEs, 7.9% reported challenges in their efforts to obtain bonding. In comparison, only one percent of non-M/WBEs reported difficulty with obtaining bonding.

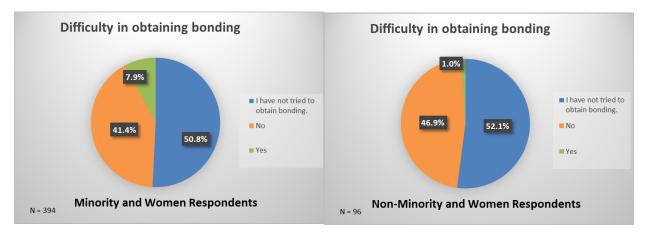


Chart 6-10: Barriers to Obtaining Bonding

Chart 6-11: Over one third (35.5%) of M/WBEs reported experiencing barriers in their efforts to obtain financing and loans. In comparison, only 14.6% of non-minority firms reported such difficulties.

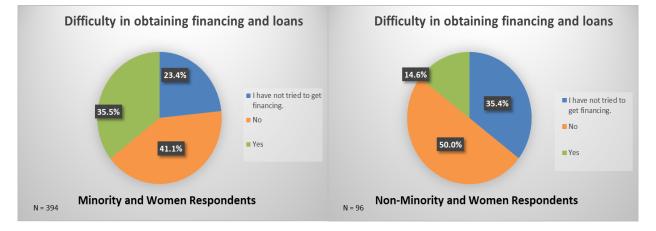


Chart 6-11: Barriers to Obtaining Financing and Loans

Chart 6-12: Among M/WBEs, 6.3% reported experiencing barriers to obtaining insurance. Only one percent of non-M/WBEs reported such difficulties.

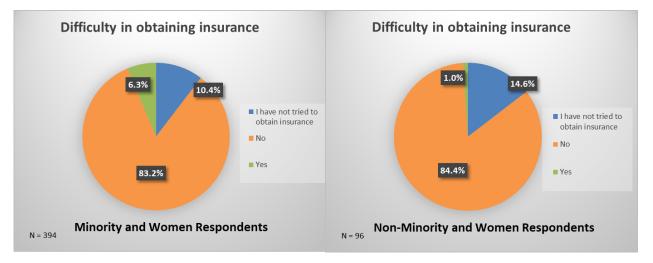


Chart 6-12: Barriers to Obtaining Insurance

5. Obtaining Work on an Equal Basis

Chart 6-13: Over 65% (65.2%) of M/WBEs reported that they are not solicited for City or government projects with M/WBE goals.



Chart 6-13: Solicitation for City or Government Construction Projects with M/WBE Goals

Chart 6-14: Over 65% (65.7%) of M/WBEs also reported that they are not solicited for private projects and projects without goals.

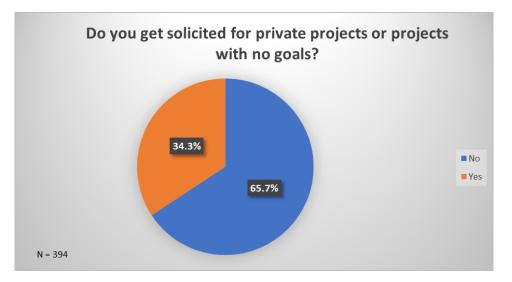


Chart 6-14: Solicitation for Private Projects and Projects Without Goals

6. Capacity for Growth

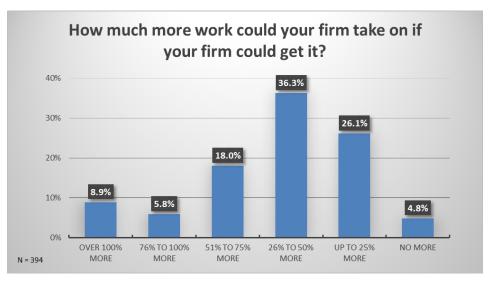
Chart 6-15: A majority of M/WBEs (55.9%) reported that their firm's contract size was either well or slightly below the amount they are qualified to perform.



Chart 6-15: Firm Contract Size vs. Contract Amounts Qualified to Perform

Chart 6-16: More than three quarters (80.4%) of minority and female respondents reported they could take on up to 75% more work if it were offered. Almost six percent (5.8%) could take on up to 100% more work, and almost nine percent (8.9%) reported they could more than double their amount of work.

Chart 6-16: Capacity for More Work



7. Prompt Payment

Chart 6-17: Of the contractors who reported doing work for the City, 82.7% said that the City paid them promptly. Prime contractors were reported to pay more slowly. A little over 60% (61.5%) of those doing work for prime contractors said prime contractors paid promptly within 30 days.

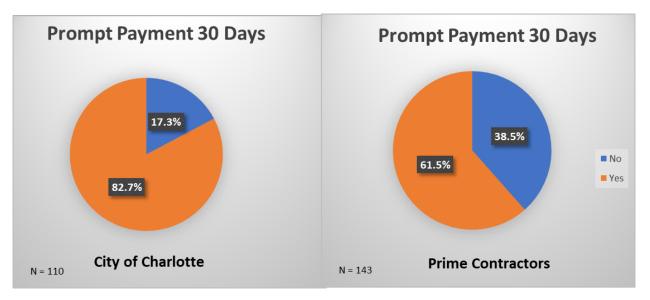


Chart 6-17: Prompt Payment within 30 Days

Chart 6-18: Of contractors performing work for the City, 91.5% reported receiving payment within 60 days; 5.9% were paid within 90 days; and 2.5% were paid in 120 days or later. Prime vendors were reported to pay on a slower schedule. A little over 80% (80.1%) said prime vendors paid within 60 days; 12.3% reported they were paid within 90 days; and 7.5% reported they were paid within 120 days or later.

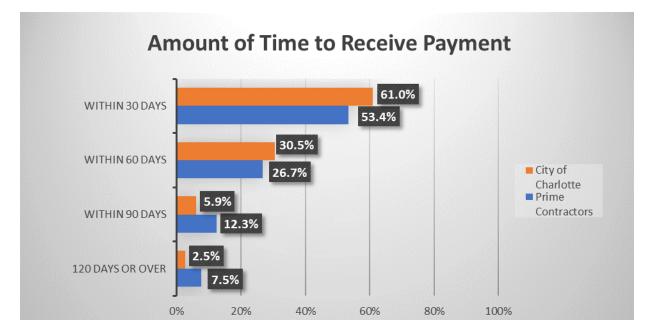


Chart 6-18: Amount of Time to Receive Payment

8. Capacity Development and Participation Incentives

Chart 6-19: Almost 80% (79.2%) of M/WBE respondents reported they had not participated in any of these programs.

- 8.9% had participated in financing or loan programs.
- 2.5% had accessed bonding support programs.
- 7.4% had received support services such as assistance with marketing, estimating, information technology.
- 7.4% had joint ventured with another firm.
- 5.1% had participated in a mentor-protégé program.

Chart 6-19: Participation in Supportive Services



C. Written Survey Responses

The survey also included open-ended response questions. These responses were consistent with information provided in the business owner interviews and close-ended questions. Responses to these questions have been categorized and are presented below.

1. Systemic racial exclusion

Many minorities reported that fair opportunities to compete for contracts were not available because of systemic racial barriers.

Getting opportunities as an African American [is a barrier.].

Being Black [is a barrier].

Color of my skin has blocked some opportunities.

North Carolina is the home of the KKK. I am 5 generations out of slavery.... You don't have to have a college degree or PHD to logically realize racisms still exist. We [are]/I am, being held back.

We may get a referral from a customer to call on another potential customer and once I make a personal contact, our services are magically no longer needed.

It seems that race is a factor when awarding projects (large scale). This is discovered via the bidding process. In some cases, milestones were not communicated to our firm but to others. Missing these milestones meant we were disqualified from the process.

I have experienced that some Caucasians and East Indians, in particular, will not do business with a black person, male or female, especially as it pertains to information about their finances, which comes up as part of the conversation when talking about health and life insurance.

Once some white clients determine I am African American they terminate the contact.

Not as many opportunities [as an African American female].

I have attended over 100 minority shows throughout the country. We have to this point, only 1 time actually captured business from these shows. 99% of the time it is through a white owned business that already has the relationship with a

company that we are able to capture any of this business. This is even when we would have been able to find savings for that customer if we were given the opportunity to supply the business on our own.

I was denied the contract due to size of my firm and race.

Definitely see a barrier due to my race.

As a Hispanic woman, for some reason I cannot pass from the networking meetings, no matter how much I try contacting or sending capability statements. The big companies come to the meetings but don't have a genuine interest, it is only to "participate."

[My company is] not getting business opportunities based on my race.

I am a Hispanic female and there always seems to be some reason that they can't do business with us. I've stopped trying.

[As a native American Indian female], the bids we have tried to participate in the consultant would not send the information we needed to send to our carriers so we could participate.

Customers and vendors often disregard me because I am a minority woman.

Due to the size of my firm, race and gender, I have been denied opportunities.

I believe because we are a small, minority owned business we're not given the same opportunity as our counterparts.

Good old Boy network continues [to be a barrier] even today.

Yes, based on both race and gender. When it comes to financial information, I can offer and discuss the same thing and be rejected. Yet, a white male, with less competency can offer same and get business without a blink.

Many organizations do not want to contract with Minority-Owned Small businesses. Most large organizations would rather have minorities as essential, skilled employees who can secure, and execute contracts, rather than have us as business partners. They may even have had prior positive relationships with the minority owner as an employee of a different company and they are aware of the high-quality work they are capable of. But when the minority becomes a small business owner in the same field, now the previous organization will refuse to contract with them, even if they have adequate legal/ financial/ insurance coverage.

America needs to be more forth coming about the sins of their founding fathers. Racism is everywhere you go when you are a person of color, its seemingly something that individuals benefiting from the system are not able to see or refuse to see.

Clearly there is a lot of racial barriers here in Charlotte and this State has a lot of work and policies need to change.

2. Discriminatory attitudes and behaviors

Many minority business owners related instances of overt racism, demeaning comments and harassment.

I witnessed white male employees call a younger Arab employee "Camel Jock" as a racist nickname. I went to upper management to report for the young man who was afraid of retaliation/losing his job for reporting. Nothing was done about this situation. I can only imagine what they called me out of earshot at that company. There are other instances as well.

[I have experienced] just open racism.

I am often stereotype as the far alt position, when invited to the table.

Some white clients express white supremacist views.

[I encounter barriers] mainly because I am to certified and I'm Hispanic.

Derogatory comments written on equipment. Nonpayment for satisfactory work.

Every day of my life, I experience sexual and or racial harassment and stereotyping.

Do not accept level of experience, not even considered, overlooked. Stereotyped as a black female.

A foreman overloaded my truck I ask him to stop. He told me that he knew what he was doing and to get back in the truck.

After our work has been sabotaged. Someone holding our money is shown work that has been installed incorrectly, like switches upside down, exposed wires sticking out of the wall, panel schedules missing. Things that were completed by my company but removed or reinstalled by others.

We hear the nigger jokes being told and our patience tested. Donald Trump hats, tee shirts and stickers worn.

And not referring any other clients or looking for collaborative opportunities. Which means they're telling people the "level" of my work capability based on their own opinions.

3. Negative perceptions of competency and professionalism

Minority respondents were often subject to stereotypical assumptions and attitudes on the basis of race. Many reported their credentials and competency are routinely questioned.

I have been asked by a hiring manager if I knew how to read AFTER I completed the application in front of him. I had to perform a reading test in front of the hiring manager to prove that I am literate by reading the label of a material we use in the industry. This was not the first or the last time I have had similar experiences. I have also been prevented from advancing into management in a company even though my skill and talent were above my coworkers, and generated hundreds of thousands of dollars for the company. Only white males were appointed to management positions regardless of their competence/ experience.

Our services are often deemed "as less than" compared to majority-owned firms.

Customers are wary and come in with preconceived ideas on what a black business looks like.

Ridiculously intense scrutiny of work and refences relative to white counterparts.

To be honest many firms look at minority firms especially black firms as being unqualified especially at the federal level.

Outbid and identified as not qualified.

Race and gender always play an issue [in creating barriers] in business.

Based on ethnicity...often need to prove experience or certifications.

Previous employer described projects as too big for me, then questioned my quote describing the tasks as simple ones, a general haggling of prices.

We work with many MWSBE companies and do see a pattern of discriminatory behavior when it comes to contracting, they are often limited to small scopes of work or non-critical path scopes, they are stereotyped, we hear things like we used one of them, we had (one) bad experience or we can't find them.

Companies wondering if we have the expertise in our marketplace. Considering that we have just our management group (4 people) with over 140 years of industry experience. It always seems silly. 2 of our largest customers are in the top 5 of [industry] purchasing in the country.

Despite my decades of experience and advanced education, I have been asked questions that go beyond mere vetting of a candidate.

Even though I was a terminal manager of a trucking company for 5 years prior to opening our company and have been in business 31 years my experience is openly discounted in some instances.

Good O'l boy network. Although we have the same or more experience as our larger competitors, technology distributors, some manufacturers pass over us due to leadership skin color.

I've had a board member of a client assure me that an upcoming opportunity would be good for my resume. The opportunity is one I've performed many times before and they assumed that I was less experienced based on my appearance only. This may have been a combination of race, gender and/or age.

On almost every business meeting [my competency is questioned].

[As an African American owned business, I am] judged by different standards.

Our services are often deemed "as less than" compared to majority-owned firms. Access to capital is not as open.

Stereotyping and mental health and competence harassment.

Every time I try to speak up, they try to silence the voice even write letters to others that are in the field to shut us down. [African American business owner].

Rarely given benefit of doubt as to capabilities and ability to deliver.

I believe I am not taken seriously.

[As an African American business owner, my competency is questioned] all the time.

Some White customers assume I'm using bad parts or cheap parts or I'm doing sub-standard work.

Competencies are questioned when people seeking health services avoid available care by practitioners of color due to negative cultural bias.

Quality Jobs are not awarded to companies of color because they feel that these companies' work is inferior to other companies of non-color.

I was told that I need a Caucasian to go to bid meeting because they don't think people of color don't know how to do that kind of work.

My competency and honesty are questioned most of the time when prospective White clients are interviewing me for a job.

Prospective customers doubt my company's abilities to do an adequate job based on my race.

My competency and the validity of the information I provide is always challenged one, because I am black, two because I am a woman.

Many times, but it is not worth going through those painful experiences [of when my competency was questioned.]

Often not heard or grossly misrepresented content when speaking of theory, plus practice that is not popular plus/or unknown.

A job will be accepted by my organization from the therapy network. However, after I have accepted the job, another nonblack organization will offer their services after I accepted and received information. The other non-black organizations always get the job despite the first come first served as it should be. Some respondents noted that it can be difficult, if not impossible, to know whether they had been subjected to discrimination.

I am not sure why, we participated in 3 bids. The companies were awarded the job but never called us to give us actual work.

You'll never be able to nail down the barriers and beliefs, but my level of work/talent doesn't match the behaviors and perceptions of me as a woman [professional]. I've seen men in this industry continue to be mediocre and grow. And I can take responsibility for all of the ways my business acumen contributes, but that also means my gender bias is a factor to consider and receive responsibility when it consistently shows up. I'd love to know how many male [profession] are asked if they shoot/do porn and how frequently it's asked. When people make these comments it's hard to believe there aren't other biases they're bringing to the conversation. And those are just the morons dumb enough to say something like that out loud.

My real answer is I don't know. I suspect preference might be give to someone of an opposite race or gender.

Not sure, if bids unanswered are based on race.

It is very difficult to identify overt discrimination. I am typically reluctant to suggest its discrimination based on race without substantial evidence, but looking at the big picture many others are or seem to be in the same position.

It will seldom be clear if race or gender effects potential buyer decisions, but it is a valid and lingering suspicion that occurs from time to time.

It might be subtle, but it is still there.

Not directly/explicitly, but it is evidenced in the difference between strategies used for negotiation by prospective clients when they are negotiating with men or women principals of competing firms.

Not outwardly.

Well, I cannot say it is either, but when you have excellent credentials and references, the MAN bidding against you gets the job, you know there is something going on, especially when their bid was five times more than yours. Not being selected to do work for the city based on a 3-year [industry] contract we have. (The other guy is always given the work. Look at the numbers). When having to bid through a prime general contractor our number is sold to another white electrical contractor whereas he is lower.

They probably do [discriminate on pricing], but I cannot prove it as of yet.

[Discrimination in pricing] is suspected but cannot be proven.

Some minority respondents noted their experiences with discriminatory behavior had improved.

I have in the past, but not recently.

It used to be terrible before 2020 but it is getting better now. Charlotte is doing a great job with educating our community.

4. Gender bias and barriers

Woman respondents reported experiencing sexist attitudes about their competency, skill and professionalism.

As a woman in the business, men tend to disregard my knowledge and qualifications because of gender.

Due to the job being as part of firearms, there have been times that males did not accept that my knowledge was equal to that of a male counterpart.

Men in the industry are often the decision makers and they typically (not always) have an attitude that women are "dumb" and don't know the subject.

Being a woman, it is assumed I don't understand and therefore cannot perform the work, men tend to dismiss me as incompetent before they know my abilities.

Trying to manage males, being taken seriously by developers and others. This is over last several years. Wasn't like this earlier. As market had tightened.

I have been in the [name] industry for 30+ years, my competency has been questioned multiple times just due to my gender and the stereotypical prejudice that a woman couldn't possibly know how to [perform].

I have been refused the opportunity to even bid projects because I am a woman. I have had a state agency request second opinions of my scientific findings, but not questioned that of a man's.

I think sometimes my competency is questioned because I'm a woman.

When I make a suggestion or recommendation to problem solve, it's ignored. However, when men (in general) make the same suggestion, there is a discussion.

Men question my intelligence and yet repeat my ideas in meetings.

My competency may be questioned based on gender when I'm pursing construction related work or projects.

I think as a woman I just don't get considered as often for partnerships on projects. I don't have a "good ol boy" network to rely on for information.

The industry we are is dominated by men and I think there is a bias based on that fact.

I worked for an [organization] that was uncomfortable with my gender as a woman [position] so I staffed the position with men. I lost a Fortune 500 bid to an equally qualified company of men despite my bid being lower and having direct work experience with the CEO, CFO and other C suite execs for 5 years. The person who made the bid decision was doing so against my gender.

No respect for a woman owned [industry] firm from men.

[As a female, it is] sometimes hard to penetrate the "boys club" mentality.

Customers and vendors often disregard, overlook, or do not take me seriously because I am a minority woman.

Many times, over the years, [my competency has been questioned].

Whenever a small law firm is involved in a civil case, the opposing firms tend to question the qualifications and competency of minority owned firm.

At times, clients want to pay less for jobs because of race or they question my professional abilities even though I have a triple A rating with the Better Business Bureau.

Barriers are preconceived bias associated with minority owned micro businesses lacking knowledge or skill to execute services.

Some women reported encountering sexist behaviors and stereotypical attitudes about their role and authority.

Routinely, I get asked if "the older gentleman" is here. This happens regardless of the fact that I am wearing a white coat and have a doctoral degree. When approached with a question, if there is a man standing next to me, the person asking the question will inevitably direct their question to him, even though he is not wearing a white coat and not qualified to respond. Once I make it clear that I am the professional they need, they tend to be comfortable working with me.

There's a running joke that I should at home while my husband is taking care of me.

[As a woman owned business], not being taken seriously.

Being the President & Co-Owner of a construction cost estimating firm can be difficult as it is very much an "old boys club".

The question from many is the level of difficulty associated with being a female and running a successful business.

Working in an environment dominated by men, it is hard to have your opinions heard as the only woman in the group.

Men wishing to conduct business, have questions answered, etc. with my male VP instead of myself.

Always questioned about my abilities and if I'm working around men, they assume they're the owner/operator of my business.

Have been told in the past "a woman would not be credible doing this project" (consulting).

With the shift in supply v demand of labor, more employees push limits. Male employees (cooks in my industry) seem to do so more against women managers. I've seen it firsthand.

It's not blatant. It's being treated as a nag or worse when I'm managing men or as either cute or too aggressive in business.

if we have the "manpower" to complete the project as a WBE owner.

Customers and vendors often disregard me because I am a minority woman.

I've had a prime contractor make decisions on my company's behalf before consulting me. I'm almost certain this would not have happened if I was a large, male and/or white owned firm. I had to bring this to the contractor's attention and I am not certain how this may prevent opportunities in the future, but I know that most all businesses would prefer to work with firms that do not present a challenge. Based on feedback from the prime, I knew they considered my pushback a challenge though I didn't initiate the inequitable treatment. I also faced challenges identifying appropriate rates to charge a prime contractor. I was able to find a resources after multiple calls and emails to several players that were awkward and uncomfortable.

People have questioned my competency based on my gender in male dominated environments. Many assume that I am unable to run a business or be assertive in pushing contracts forward.

Outright sexual harassment remains a challenge for some women.

Sexual harassment is so common at a video shoot it's expected. Even with freelancers I hire I constantly have to remove someone from rotation. Being a contract worker has opened the door for even worse behavior because I don't have a pathway to protection without losing a client/money.

Stereotyping of women. Sexual remarks - men talking about other women, etc.

Often times when I am seeking networking opportunities men are more concerned with my physical appearance than doing business with me.

One woman respondent commented that the role of woman-business owners has changed over time.

Years ago, it was a different world. Now, women bring home the money that is a staple in a lot of the marriages.

5. Access to networks

Many minority and woman business owners felt excluded from formal and informal networks necessary for building relationships and for success.

I am not aware of opportunities that are available in the marketplace, and oftentimes not included in networks that are comprised of mostly white males.

A lot of informal networking at private clubs and things like golf events exclude women.

It seems opportunities are given to firms that have existed longer than mine, have better relationships and more resources.

Contract awards are decided upon before the RFP is open.

In many instances, bids reference desire to utilize minorityowned company, however, it does not seem as though this is actually used in decision making process.

Information is not widely shared or received through word of mouth at the last minute.

As a result of social segregation, I do not have the personal relationships as do my white competitors. I have also been told that I would not have a subcontract if I was not an MBE. I also sense that, despite my track record in business, that there is a distrust when it comes to awarding my company a large contract.

The advertising and production industry is still very segregated. I am not connected with the social networks that matter.

This is the area where for a small business there is a huge challenge. Even experienced bidders for contracts will tell you that if you are not on the inside and know about the bid in advance it is typically a waste of time to invest the time. I have never won a bid. However, I have worked on bids won by others that have the apparatus in place.

Those conversations occur offline, behind closed doors and/or in social situations.

Ability to easily find out about programs. It's like you have to be a part of a secret society to learn ready and available programs.

Building partnerships getting contracts.

Not being invited to the contracting table until all the contracts have been decided by developers. Access to information and resources is critical. In the event that a business opportunity is open and accessible to all, I have found that I have had to dig for information to be prepared for opportunities that other firms may be 10 steps ahead of me on, simply due to their relationships and access to key information to prepare them for an opportunity. There are also firms that are led by older white men or women who are more respected by way of reputation and not production that have been mentioned in discussions with prospective clients.

As a minority business is hard without the network others have.

The connections with non-certified firms are not easy to access or maintain. The last 18 months politically have not made genuine connections easy; lack of trust, etc.

I watch very often the upcoming bids/proposals, yet I hear about contracts in my line of work being awarded that were not advertised or was I invited to bid/propose.

My perception is that many non-certified firms in my industry have better access to information. Perhaps this is the ability to have side-conversations outside of networking events.

It's complex. I do not have personal relationships with those who have power to support our efforts to get contracts.

No exposure.

I do not believe that I have complete access to these networks.

Don't get any invites.

Some reported that they were not receiving the same information as non-certified firms.

I'm sure I have some information but I am sure there is more that should and can be readily available.

The barriers begin at lack of connections with primes that seem to have the inside info.

Because sometimes you don't even know about the information!!

The network is small, specialized and somewhat closed.

Due to prior networks those firms may have [more information].

It is apparent in teaming opportunities that they have more and better info than us.

Other firms have an advantage with knowledge, support and business model.

Some information is available while I know it has to be information that we don't have access to because of lack of association.

I have not received many job orders or I notice that my company is left out on emails.

They are the ones getting the business, so they obviously have different contacts that get the job done for them than we do.

Access to decision-makers were seen as a challenge.

The incumbents seem to have access to the personnel in the administration and therefore have a leg up. We would like a formal meeting with the decision makers in what they are actually looking for and know if we are falling short on expectations.

Access to decision-makers [not available], not sure if this is related to race or gender or not.

Some felt that government agency staff were unavailable to assist with networking.

As a small firm, it is more difficult to access knowledgeable staff at government agencies.

Not for any government opportunities, but I do for nongovernment. Whenever I've tried reaching out to a government agency for business, I either never get a response or get told to contact someone else and the pattern continues until I give up.

I believe the information is there however no one really explains or assists with said information.

Some M/WBE firms reported that being small and new put them more at a disadvantage.

As a newer firm and smaller firm there is no way to have established the relationships necessary to have the same insights/information.

Larger firms have networks of colleagues and/or employees that can constantly seek out opportunities through formal and informal channels.

Our barriers come in from being a small business.

6. Access to contract opportunities

Many minority and woman respondents felt that prime bidders often use them only to meet race-conscious or gender-conscious procurement goals.

Many times, I am only contacted because a contractor is trying to meet a good faith effort or MWBE/HUB requirement and that's why they are contacting me to partner. Otherwise, I am not contacted to partner with them on projects where the MWBE/HUB provisions do not apply.

It is rare for us to receive bid information that does not require a set-aside. It seems that non-government entities assume we are either not interested or not capable. More likely they don't solicit MBE firms when they aren't required to. In my experience, commercial entities have no desire to use minority firms unless/until they are forced to and even then, it's usually for low wage/low contract value work.

Many of the Fortune 1000 companies 99% of the time will use us just to say they had some minority company quote on their business, with no intention of using a minority firm. They want to check the box that states they tried.

7. Financial barriers to opportunities

Many M/WBEs reported discriminatory barriers when trying to obtain financing and bonding that have reduced their capacity to grow and compete on an equal basis.

Traditional banks are not helpful to minorities.

Higher bonding rates based on race.

I was denied loans due to my race. Also, once they found out my race, they wanted to make changes to contracts or terms.

With [name] bank. They discriminate against race and gender.

My business credit and personal credit are both great, yet I have been denied loans by [name] and other banks. The reason is definitely discrimination.

I was offered a loan, but it required ridiculous collateral. I have great credit. I have seen Caucasian men who earn equal pay to me (without great credit) receive more money with no collateral. For these reasons, I turned the loan (which was badly needed) down.

I have been told that I don't meet the banks/credit union guidelines for loans although I have excellent credit, strong finances and a stellar payment history.

Access to capital. MBE firms are usually judged more critically than other firms and are generally perceived by financial institutions as being higher risk and less capable or competent. However worse than this is that government employees typically do not trust MBE firms or like financial institutions judge us according to a different standard. Government employee hostility is persistent and pervasive.

Banking is controlled by white men. White men often times feel comfortable stealing from African Americans and discriminating against them in business, especially in banking.

I just never qualify.

I tried to get an unsecured loan. I have good credit and cash in the bank. They said I didn't qualify though because I didn't pay myself enough, even though repayment would have been through the business. I also don't pay myself a lot because I am reinvesting in growing my business. This would be easier to do if they had granted me the loan.

Yes, always collateral even when you have shown in your business plan what you can achieve and have shown with past experiences and examples.

I have faced many challenges when trying to obtain bonding and have lost job opportunities due to this.

When seeking financing from companies or legal services some questions our legitimacy due to being a woman and minority operated business. We have been in business for 16 years. Our company has been financed by personal credit cards and personal loans from a family member. We have never been able to borrow enough to purchase warranted trucks to keep our business in the black.

After two attempts to obtain business loans from Bank of America, our applications were not approved.

I can never get a business loan always denied.

There always seems to be a reason to say no.

None [bonding] offered despite financial records.

Access to capital is one of the major obstacles.

Banks that I have worked with did not want to provide business loans despite my business and personal credit being excellent. They would mainly offer high-interest credit lines and highinterest personal loans for a relatively small amount that always would include my house as an asset. Essentially risking my family home in a volatile economy for a paltry 10k.

In 2017, our company had a serious cash-flow crunch. I went to my business bank, which processes nearly all of our revenue, and was denied a line of credit, as well as an increase in my existing company credit cards, with the same bank.

Without a high business credit and bank connections, I could not even get a business credit card.

The insurance agent told me because my business imports my product, you couldn't get insurance but I could just tell he didn't just like the fact that I was a small business that deals in African products so I called the same number, got another agent and was able to get insurance.

8. Barriers to equal contract terms.

Some minority and woman respondents reported being charged higher pricing for materials based on their race, ethnicity and gender.

Many suppliers are afraid of quoting us unless we have documentation of it being specifically a minority mandated piece of business.

Prices are at times higher for me when I am doing business face to face with other companies.

Suppliers have different levels of pricing. The more you buy, the better your discount. Because MBEs are new companies, we are given no discounts. And our accounts are monitored even more closely. We are charged service fees, late fees, delivery fees, etc.

I feel as though I often receive higher quotes based on my gender. I typically utilize my male friends to get quotes for me.

White-owned businesses tend to get better price breaks, get preferred projects and given preferential treatment with access to those clients who hold the large-scale projects.

We do not get the same multipliers [for pricing] as our lighter skin counter parts. We have been outright discriminated against due to skin color.

I believe that they give me higher rates because I am a woman.

I have paid higher rates for [materials and services on] some projects vs. some of my white friends who do the same thing as I do.

I think sometimes due to who I am as a black female [I am subject to pricing discrimination.]

Increase in pricing based on race.

Increased pricing because I'm a female.

Subconsciously yes, [I have experienced pricing discrimination from suppliers].

Some minority and woman respondents reported that they are often under pressure to reduce their pricing relative to their White male counterparts.

Based on ethnicity [clients] often want lower rate.

Consistent pressuring to lower our prices from particular clients who do not behave the same way toward traditional, maleowned firms.

I am not sure that it is being done on purpose, but my price is significantly lower. However, when making price changes there has been resistance.

I have experienced contractors offering much less for fulfillment than they do for others who are not minorities.

I know of instances where MBEs are offered substantially less for subcontract work than non-MBE's.

Many contractors do not want to pay my rate of service which is a competitive industry standard. Distributors have been reluctant to work with my company without my business making unusually large purchases. These large purchases become liabilities if they are not sold, therefore the business relationship becomes a risk. My white peers in my industry do not have this same issue. They are often paid their rate of service and provided distribution opportunities that incur less risk.

Many of these are unspoken, passive aggressive experiences. No call back after sending rates. Questioning rates that are already lower than male counterparts. Male colleagues referring lesser budget or no budget clients to me (as a "favor"), despite having the same or more experience than them.

New woman owned IT business and definitely not paid compatible [sic] based on man-owned companies of similar nature.

One company that I run my dump trucks with pays male dump truck owners more than he pays my company which is female owned.

The rates will be greatly reduced or not considered at all [based on my race].

There was a time that had happened [when I received lower rates]. [I knew] because I had a white friend bidding on the same contract.

Clients think your bill rate should be less because of your race.

We are doing the same work but paid at a much lower rate. We have fewer complaints; we have more stability, and our work product is superior than the Prime. However, we are paid less for doing the same work and the same work classifications.

White contractors are paid more.

Banks that I work with and broker deals through pay me less commission and red line aggressively against my African American clients. They also steal clients in many instances. Being a minority, most times rates will be less or not considered at all.

I have found that when my "competition" increases their rates and I attempt to do the same, there is significant push back. It only happens with particular customers.

D. Conclusion

Consistent with other evidence reported in this Study, the business owner interviews, and the survey results strongly suggest that minorities and women continue to suffer widespread discriminatory barriers to full and fair access to contracts and associated subcontracts in the City of Charlotte's market area. Many M/WBEs reported negative perceptions and assumptions about their competency that reduced their ability to conduct business. Minorities and women still suffer from stereotyping, hostile environments, overt racism and sexism. M/WBEs had reduced opportunities to obtain contracts, less access to formal and informal networks, and much greater difficulties in securing financial support relative to non-M/WBEs in their industries. A large number indicated that they were working well below their capacity.

Anecdotal evidence may "vividly complement" statistical evidence of discrimination. While not definitive proof that the City needs to continue to implement raceconscious and gender-conscious remedies for these impediments, the results of the qualitative data are the types of evidence that, especially when considered in conjunction with other evidence assembled, are relevant and probative of the City's evidentiary basis to consider the use of race-conscious and gender-conscious measures. City of Charlotte Disparity Study 2022

VII. RECOMMENDATIONS FOR THE CITY OF CHARLOTTE'S MINORITY-OWNED AND WOMAN-OWNED BUSINESS ENTERPRISES

The quantitative and qualitative data in this Study provide a thorough examination of the evidence regarding the experiences of Minority-owned and Woman-owned Business Enterprises ("M/WBEs") in the City of Charlotte's ("City") geographic and industry markets. As required by strict constitutional scrutiny, we analyzed evidence of the City's utilization of M/WBEs as a percentage of all firms as measured by dollars spent, as well as M/WBEs' experiences in obtaining contracts in the public and private sectors. We gathered statistical and anecdotal data to provide the City with the evidence necessary to determine whether there is a strong basis in evidence for the continued use of race-conscious and gender-conscious goals for its Charlotte Business Inclusion ("CBI") Program for Historically Underutilized Businesses ("HUBs"), and if so, how to narrowly tailor its Program.

Through the Charlotte Business Inclusion Office, the City of Charlotte has implemented an aggressive program. Setting goals, conducting outreach, and enforcing policy requirements have resulted in some M/WBEs reaching parity in City contracting. However, evidence beyond the City's achievements strongly suggests these results reflect the effect of the CBI program.

Outside of City and other local government contracts, M/WBEs face large disparities in opportunities for public sector and private sector work in the Charlotte area markets. The results of the anecdotal data analyses further support the inference that utilization is the result of contract goals; in the absence of affirmative efforts, minority and woman businesses receive little work, remain subject to biases and are often shut out of business opportunities.

The quantitative and qualitative findings support the conclusion that the current effects of past discrimination and ongoing bias would be barriers to City work in the absence of race-conscious and gender-conscious remedies.

Based upon these results, we make the following recommendations. We recognize that many of our recommendations, both race-neutral and gender-neutral and race-conscious and gender-conscious, will require more staff and technical resources to be devoted to the Program. It will also be important to have refresher training on the Program and any new elements for City staff with contracting or procurement responsibilities. Similar information should also be provided to other senior City leadership, elected officials and the public.

A. Augment Race-Neutral and Gender-Neutral Measures

The courts require that governments use race-neutral and gender-neutral approaches to the maximum feasible extent to address identified discrimination. This is a critical element of narrowly tailoring the Program, so that the burden on non-M/WBEs is no more than necessary to achieve the City's remedial purposes. Increased participation by M/WBEs through race-neutral measures will also reduce the need to set M/WBE contract goals. We therefore suggest the following enhancements of Charlotte's current efforts, based on the business owner interviews and survey responses, input of City staff, and national best practices for contracting affirmative action programs.

1. Develop a Long Term Procurement Forecast

We recommend that the City expand its current procurement forecast to not only include annual projects, but also project out five years for Capital Improvement Projects. A comprehensive and transparent site that provides information on upcoming bid opportunities is one race-neutral and genderneutral measure that will assist all firms to access information.

2. Extend the Quick Pay Program

The City currently offers a Quick Pay option as part of the consideration of Good Faith Efforts ("GFEs") for a bidder that does not meet the contract goal at the time of bid submission. The prime vendor commits to paying participating MWSBEs within 20 days after the contractor confirms that the MWSBE has properly performed the subcontracted work. To the extent permitted by law, we suggest that this option be extended to firms that meet the goals and across all industries. The incentive to the prime vendor will need to be a commitment for faster payment by the City to the prime vendor, perhaps within 21 days of submission of the prime's approved invoice.

3. Expand Supportive Services Offerings

The City currently offers several programs and events for vendor training. Many firms reported these were helpful in increasing their capabilities and overall business skills. However, vendors and City staff requested additional support in the following areas.

- Both M/WBEs and large non-M/WBEs reported that inadequate estimating skills for construction contracts were a barrier to the participation of certified firms. Classes on estimating bids and preparing paperwork would help M/ WBEs to be more competitive, both as subcontractors and prime contractors.
- Experienced minority and woman owners suggested more sophisticated and advanced offerings for mature M/WBEs. These could include web marketing, succession planning, legal services and accounting support.
- Many firms, M/WBEs and non-M/WBEs alike, pointed to barriers to accessing financial capital as limits on the growth and successful of certified firms. The city should consider implementing loan programs to assist small firms to obtain needed funding to perform on City contracts. There are many models, including linked deposit programs and revolving loan funds, that can help to fulfill these needs.
- M/WBE construction owners requested support specific to their industry. A robust technical assistance, capital access and bonding support program should include²⁸⁸:
 - Consultative and technical assistance, including one-on-one coaching.
 - Contractor assessments.
 - Referrals to qualified partner resources, including surety brokers, insurance brokers, lenders, certified public accountants and construction attorneys.
 - Educational opportunities for contractors (bonding, QuickBooks[®] and other systems training, estimating, marketing, etc.).
 - Surety partner commitments.
 - Pre-claims resolution.

^{288.} One model is the program for the Illinois Tollway 's Partnering for Growth Program. https://www.illinoistollway.com/doing-business/diversity-development/programs-12#P4G.

B. Continue to Implement Narrowly Tailored Race-Conscious and Gender-Conscious Measures

1. Use the Study to Set the City of Charlotte Overall, Annual Aspirational HUB Goal

The City's program has been successful in opening up opportunities for minority and woman firms on its contracts. As reported in Chapter IV, M/WBEs in the aggregate have reached parity on City contracts. When we examined whether firms were concentrated within an industry or between industries on the basis of race or gender, however, a picture emerged of unequal outcomes for M/WBEs compared to non-M/WBEs.

Further, as documented in Chapter V, when examining outcomes in the wider economy, it is clear that M/WBEs do not yet enjoy full and fair access to opportunities to compete for construction and construction-related services contracts. Data from the Census Bureau's Survey of Business Owners indicate very large disparities between M/WBE firms and non-M/WBE firms when examining the sales of all firms, the sales of employer firms (firms that employ at least one worker), or the payroll of employer firms. Similarly, data from the Census Bureau's American Community Survey ("ACS") indicate that Blacks, Hispanics and White women were underutilized relative to White men. Controlling for other factors relevant to business outcomes, wages and business earnings were lower for these groups compared to White men. Data from the ACS further indicate that non-Whites and White women are less likely to form businesses compared to similarly situated White men. The results of numerous small business credit surveys reveal that M/WBEs, especially Black-owned firms, suffer significant barriers to business financing. There are also racebased barriers to the development of the human capital necessary for entrepreneurial success.

Our interviews with individual business owners and the results of our survey further buttress the conclusion that race and sex discrimination remain persistent barriers to equal contacting opportunities. Many minority and female owners reported that they still encounter barriers based on their race and/or gender and that without affirmative intervention to increase opportunities through contract goals, they will continue to be denied full and fair chances to compete.

In our judgment, the City's utilization of M/WBEs is primarily the result of the operations of its CBI Program, not the remediation of discrimination outside of contracting affirmative action programs. Without the use of goals, Charlotte may become a "passive participant" in the market failure of discrimination.

We therefore recommend that the City continue to use narrowly tailored raceconscious and gender-conscious measures. These should include using the weighted availability estimates to set its overall, annual aspirational HUB goal.

2. Use the Study to Set MBE and WBE Contract Goals

In addition to setting overall, annual targets, the City should use the Study's detailed unweighted availability estimates as the starting point for contract specific goals for MBE and WBE participation. As discussed in Chapter II of this Report, an agency's constitutional responsibility is to ensure that goals are narrowly tailored to the specifics of the project. The aspirational goal may be referenced in a solicitation that does not include contract goals so long as it is clear that there is no requirement for any specific action by the bidder and the participation of M/WBEs is not a factor in contract award.

The narrowly tailored contract goal setting methodology involves four steps, regardless of the industry scopes of work of the project:

- Weight the estimated dollar value of the scopes of the contract by sixdigit North American Industry Classification System ("NAICS") codes, as determined during the process of creating the solicitation.
- Determine the unweighted availability of M/WBEs in those scopes, as estimated in the Disparity Study.
- Calculate a weighted goal based upon the scopes and the availability of at least three available firms in each scope.
- Adjust the resulting percentage based on current market conditions and progress towards the annual goal.

The City's B2Gnow electronic data system has a goal setting module designed specifically to interface with the data from our disparity studies, that can used to assist the City to set defensible goals.

Where there is a significant change order issued by the City, the contract goal should be evaluated to determine the change order's impact on goal attainment. If an M/WBE's scope is reduced such that the original contract goal will not be met, the contractor should be required to make GFEs to add participation if possible. If an M/WBE's scope is increased, the M/WBE must be used for the increased amount if it is able to perform.

Written procedures amending current practices to spell out the steps should be drafted and disseminated.

This constitutionally mandated approach may result in goals that are higher or lower than the annual goals, including no goals where there are insufficient subcontracting opportunities (as is often the case with supply contracts) or an insufficient number of available firms. The annual goals should not be used for setting contract goals regardless of the size of the contract, since they are not narrowly tailored to the specifics of the project.

We further urge the City to simplify the goal setting standards and process. First, we suggest that all non-exempt contracts over a certain dollar threshold be reviewed or contract goal setting (\$200,000 for construction seems high, as there might well be opportunities for subcontracting on projects of this size). Second, f the CBI staff determines that no goal should be set, that is not a "waiver" of anything; rather, it is the judgment that this contract is not appropriate for goal setting.

We recommend that SBE firms that are not also certified as MBEs or WBEs not be counted for credit towards meeting the MBE or WBE contract goals. The purpose of the Program and the use of narrowly tailored contract goals is to remedy identified discrimination on the basis of race or gender. Minorityowned or woman-owned firms that are only SBE certified should be encouraged to apply for certification through the State of North Carolina's HUB program.

For alternative delivery methods such as design-build contracts, the City should follow the guidance from the U.S. Department of Transportation on how best to incorporate M/WBE program elements into these phased contracts.²⁸⁹

We further urge the City to bid some contracts without goals that it determines have significant opportunities for MBE or WBE participation. These control contracts can illuminate whether certified firms are used or even solicited in the absence of goals. The development of some "unremediated markets" data, as held by the courts, will be probative of whether the Program remains needed to ensure the playing field remains level for minorities and women.

3. Clarify and Update CBI Program Administration Policies and Procedures

While the current Program has produced admirable results, there are some revisions that can strengthen the City's efforts. In general, we urge the City to model its provisions after the regulations for the Disadvantaged Business Enterprise ("DBE") program for US Department of Transportation.²⁹⁰ These

^{289.} https://www.fhwa.dot.gov/civilrights/programs/dbe_acm_handbook_20180820.pdf; see also 49.C.F.R. § 26.53(e) ("In a "design-build" or "turnkey" contracting situation, in which the recipient lets a master contract to a contractor, who in turn lets subsequent subcontracts for the work of the project, a recipient may establish a goal for the project. The master contractor then establishes contract goals, as appropriate, for the subcontracts it lets.").

^{290. 49} C.F.R. Part 26.

regulations have become the "gold standard" and best practices for contracting affirmative action programs and have been upheld by every federal court that has considered a challenge. They have been amended several times since their adoption in 1999 and represent the best national thinking on legally defensible and administratively successful program implementation. Further, as discussed in Chapter II of this Report, courts have looked to the DBE regulations in evaluating whether a local agency's program is constitutional.

- Expand the pool of firms eligible for certification and to be counted towards contract goals to include firms located anywhere in the state of North Carolina and York County, South Carolina. This will align the eligibility standards with the City's market area, as found by the Study's analysis. The City might add that firms with a "significant local business presence" in the Charlotte market, perhaps documented by the receipt of at least three contracts within the last three years, also be eligible to apply for City certification.
- Permit a firm owned by minority females to be certified as both an MBE and a WBE. Such a firm could be counted towards either goal by the prime bidder but could not be double counted or have its dollars split between the two goals on a particular contract. This will expand opportunities for MWBEs while providing flexibility for bidders. This will require a change in state law.
- Recognize firms for M/WBE status using NAICS codes (developed by the Census Bureau), not National Institute of Government Purchasing ("NIGP") codes. NIGP codes are extremely granular, which makes the process of conducting outreach to meet goals very burdensome to prime bidders. NAICS codes will allow prime vendors to more easily search for firms and reduce the certification burden on both applicants and the City. Switching to NAICS codes will also align the City's processes and lists with the data in this Report.
- Count the self-performance of certified prime vendor MBEs and WBEs towards the contract goal for which they qualify. While the City's documents describe the contract goals as "subcontracting goals", in practice the goals properly apply to the entire amount of the contract value, not just to those dollars expected to be spent with subcontractors. Prohibiting prime M/WBEs from counting their own participation forecloses the only race-conscious remedy an agency can provide to prime contractors to reduce the race-based and gender-based barriers to their obtaining work. There is little doubt that it is even more difficult for M/WBEs to move into the prime role than to obtain subcontracts (as amply documented in this Report and other disparity studies). Therefore, forcing M/WBEs that can perform as prime vendors to subcontract what

they would otherwise self-perform not only leaves them at the mercy of the marketplace that is infected with discrimination and with no benefit from participating in the program, but also would increase their costs of performing City work.

There is also the benefit of relieving CBI staff of the burden of reviewing "pre-clearance" requests while removing the uncertainty that an approval process introduces into the submission process.

Further, if only subcontracting dollars can count towards the contract goal, then only subcontracting dollars can be included for purposes of setting narrowly tailored contract goals. This means that whatever portion of the work a prime vendor self-performs must be deducted from the overall contract value before setting the contract goal. For example, on a \$1M contract with a 30% self-performance requirement and a 20% goal, this would mean that the 20% applies to only 70% of the dollars, leading to a goal of 14% rather than 20%.

Finally, the DBE program regulations, which have been repeatedly upheld by the federal courts, clearly permit self-performance to be counted towards contract goals²⁹¹, and this is by far the most common approach across the country. Charlotte should follow suit.

- Only count work to be performed in those industry codes in which the MBE or WBE is certified. This simple approach has at least three benefits:
 1. It helps to ensure integrity in the implementation of the program by foreclosing "front" companies and pass throughs at bid time.
 2. It supports the evaluation of firms' CUFs during performance at bid time and during contract performance.
 3. It creates clear standards that all parties must follow by removing the subjective element of consideration of what work a firm "might" become certified to perform.
- Revise the standards for evaluating a bidder's GFEs to meet contract goals. Use the DBE program regulations as the guide to comprehensive GFE reviews.
 - Require a bidder to conduct GFEs even if it desires to perform the entire work of the contract with its own forces. The desire to self-perform, standing alone, should not relieve the bidder of the responsibility of trying to include M/WBEs where there are appropriate scopes of work and sufficient availability.²⁹²

^{291. 49} C.F.R. § 26.55(a)("Count the entire amount of that portion of a construction contract ... that is performed by the DBE's own forces... Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services").

- Use a holistic approach to evaluating GFEs submissions. A rigid point system may not meet the strict scrutiny test for flexibility and may encourage bidders to do the bare minimum needed to get the minimum number of points, even when additional participation could have been achieved with additional efforts.²⁹³
- Do not permit bidders to negotiate their GFEs after submission or add more participation to meet the contract goals. To do so is unfair to firms that met the goals or made GFEs, and it weakens Program enforcement by signaling to bidders that this element of responsiveness is not actually critical to the determination that they can move forward in the bidding process.
- Adopt flexible remedies for Program violations. The current structure of specified fines for particular violations may be overly rigid under the strict scrutiny standard. We suggest that infractions or contract breaches be considered on a case-by-case basis to ensure that the civil penalty is not overly burdensome under the *Croson* standard.

4. Adopt a Mentor-Protégé Program

There was broad support among M/WBEs, large prime vendors and City staff for a mentor-protégé program to increase M/WBEs' capabilities and foster relationships. While many mentor-protégé programs across the country focus on construction (perhaps in part because of the longer history of programs in this sector), technology sectors and professional services should also be included.

We suggest modeling a new initiative after the successful programs approved by the U.S. Department of Transportation. These programs provide support for M/WBEs while incentivizing the mentor to provide the types of assistance tar-

geted to the protégé to produce identified and achievable goals.²⁹⁴ Program elements must be clearly spelled out so as not to impinge on the independence of the certified firm or raise concerns about whether it is performing a commercially useful function.

A program should include:

• A description of the qualifications of the mentor, including the firm's number of years of experience as a contractor or consultant; the

^{292. 49} C.F.R. Appendix A, § IV. D.(2) ("the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts").

^{293. 49} C.F.R. § 26.53 and Appendix A, *Guidance Concerning Good Faith Efforts* ("Determinations should not be made using quantitative formulas.").

^{294.} See 49 C.F.R. Part 26, Appendix D, "Mentor-Protégé Guidelines".

agreement to devote a specified number of hours per month to working with the protégé; and the qualifications of the lead individual responsible for implementing the development plan.

- A description of the qualifications of the protégé, including the firm's number of years of experience as a contractor or consultant; the agreement to devote a specified number of hours per month to working with the mentor; and the qualifications of the M/WBE owner(s).
- A written City-approved development plan, which clearly sets forth the objectives of the parties and their respective roles, the duration of the arrangement, a schedule for meetings and development of action plans, and the services and resources to be provided by the mentor to the protégé. The assistance provided by the mentor must be detailed and directly relevant to City work. The development targets should be quantifiable and verifiable—such as increased bonding capacity, increased sales, increased areas of work specialty or prequalification—and reflect objectives that increase the protégé's capacities and expand its business areas and expertise.
- A long term and specific commitment between the parties, e.g., 12 to 36 months.
- A provision for the use of any equipment or equipment rental.
- Extra credit for the mentor's use of the protégé to meet a contract goal (e.g., 1.25% for each dollar spent), with a limit on the total percentage that could be credited on a specific contract and on total credits available under the Plan.
- Any financial assistance by the mentor to the protégé must be subject to prior written approval by the City and must not permit the mentor to assume control of the protégé or otherwise impinge on the protégé's continued program eligibility.
- A fee schedule to cover the direct and indirect cost for services provided by the mentor for specific training and assistance to the protégé.
- A provision that the Plan may be terminated by mutual consent or by the City if the protégé no longer meets the eligibility standards for M/WBE certification; either party desires to be removed from the relationship; either party has failed or is unable to meet its obligations under the plan; the protégé is not progressing or is not likely to progress in accordance with the plan; the protégé has reached a satisfactory level of selfsufficiency to compete without the plan; or the plan or its provisions are contrary to legal requirements.

- Submission of quarterly reports by the parties indicating their progress toward each of the Plan's goals.
- Regular review by the City of the parties' compliance with the Plan and progress towards meeting its objectives. Failure to adhere to the terms of the Plan or to make satisfactory progress would be grounds for termination from the Program.

We recognize that this level of direction and oversight will require resources. Close monitoring of the program will also be critical.

C. Develop Performance Measures for CBI Program Success

The City should develop quantitative and qualitative performance measures for M/WBEs and the overall success of the Program to evaluate its effectiveness in reducing the systemic barriers identified in this Report. In addition to meeting the overall, annual goals, possible benchmarks might be:

- The number of bids or proposals, the industry and the dollar amount of the awards and the goal shortfall, where the bidder was unable to meet the goal and submitted GFEs to do so.
- The number, dollar amount and the industry code of bids or proposals rejected as non-responsive for failure to make GFEs to meet the goal.
- The number, industry and dollar amount of MBE and WBE substitutions during contract performance.
- Increased bidding by certified firms as prime vendors.
- Increased prime contract awards to certified firms.
- Increased M/WBE bonding limits, size of jobs, profitability, complexity of work, etc.
- Increased variety in the industries in which minority- and woman-owned firms are awarded prime contracts and subcontracts.

In addition, departments could receive an annual or even quarterly "scorecard on their progress towards meeting the overall, annual aspirational City goal. Such a scorecard would have to take account of the fact that different departments procure different goods and services so that the result is tailored to the specifics of each department's contracting activities.

Development and tracking of new metrics may require additional software.

D. Continue to Conduct Regular CBI Program Reviews

The City adopted a sunset date for the current Program, and we suggest this approach be continued. Data should be reviewed approximately every five to six years, to evaluate whether race- and gender-based barriers have been reduced such that affirmative efforts are no longer needed. If such measures are necessary, then the City must ensure that they remain narrowly tailored.

APPENDIX A: FURTHER EXPLANATION OF THE MULTIPLE REGRESSION ANALYSIS

As explained in the report, multiple regression statistical techniques seek to explore the relationship between a set of independent variables and a dependent variable. The following equation is a way to visualize this relationship:

$$\mathsf{DV} = \mathsf{f}(\mathsf{D}, \mathsf{I}, \mathsf{O})$$

where DV is the dependent variable; D is a set of demographic variables; I is a set of industry & occupation variables; and O is a set of other independent variables.

The estimation process takes this equation and transforms it into:

$$DV = C + (\beta 1 * D) + (\beta 2 * I) + (\beta 3 * O) + \mu$$

where C is the constant term; $\beta 1,\,\beta 2$ and $\beta 3$ are coefficients, and μ is the random error term.

The statistical technique seeks to estimate the values of the constant term and the coefficients.

In order to complete the estimation, the set of independent variables must be operationalized. For demographic variables, the estimation used race, gender and age. For industry and occupation variables, the relevant industry and occupation were utilized. For the other variables, age and education were used.

A coefficient was estimated for each independent variable. The broad idea is that a person's wage or earnings is dependent upon the person's race, gender, age, industry, occupation, and education. Since this report examined the City of Austin, the analysis was limited to data from the City of Charlotte, the analysis was limited to data from the State of North Carolina and York County in South Carolina. The coefficient for the new variable showed the impact of being a member of that race or gender in the metropolitan area. City of Charlotte Disparity Study 2022

APPENDIX B: FURTHER EXPLANATION OF THE PROBIT REGRESSION ANALYSIS

Probit regression is a special type of regression analysis. Probit regression analysis is used to explore the determinants of business formation because the question of business formation is a "yes' or "no" question: the individual does or does not form a business. Hence, the dependent variable (business formation) is a dichotomous one with a value of "one" or "zero". This differs from the question of the impact of race and gender of wages, for instance, because wage is a continuous variable and can have any non- negative value. Since business formation is a "yes/no" issue, the fundamental issue is: how do the dependent variables (race, gender, etc.) impact the probability that a particular group forms a business? Does the race or gender of a person raise or lower the probability he or she will form a business and by what degree does this probability change? The standard regression model does not examine probabilities; it examines if the level of a variable (*e.g.*, the wage) rises or fall because of race or gender and the magnitude of this change.

The basic probit regression model looks identical to the basic standard regression model:

$$DV = f(D, I, O)$$

where DV is the dependent variable; D is a set of demographic variables; I is a set of industry and occupation variables; and O is a set of other independent variables.

The estimation process takes this equation and transforms it into:

 $DV = C + (\beta 1 * D) + (\beta 2 * I) + (\beta 3 * O) + \mu$

where C is the constant term; $\beta 1,\,\beta 2,\,and\,\beta 3$ are coefficients, and μ is the random error term.

As discussed above, the dependent variable in the standard regression model is continuous and can take on many values while in the probit model, the dependent variable is dichotomous and can take on only two values: zero or one. The two models also differ in the interpretation of the independent variables' coefficients, in the standard model, the interpretation is fairly straightforward: the unit change in the independent variable impacts the dependent variable by the amount of the coefficient.²⁹⁵ However, in the probit model, because the model is examining changes in probabilities, the initial coefficients cannot be interpreted this way. One additional computation step of the initial coefficient must be undertaken in order to yield a result that indicates how the change in the independent variable affects the probability of an event (*e.g.*, business formation) occurring. For instance, with the question of the impact of gender on business formation, if the independent variable was WOMAN (with a value of 0 if the individual was male and 1 if the individual was female) and the additional computation chance of the coefficient of WOMAN yielded a value of -0.12, we would interpret this to mean that women have a 12 percent lower probability of forming a business compared to men.

^{295.} The exact interpretation depends upon the functional form of the model.

APPENDIX C: SIGNIFICANCE LEVELS

Many tables in this Report contain asterisks indicating that a number has statistical significance at 0.001, 0.01, or 0.05 levels (sometimes, this is presented as 99.9 percent; 99 percent and 95 percent, respectively) and the body of the report repeats these descriptions. While the use of the term seems important, it is not self-evident what the term means. This Appendix provides a general explanation of significance levels.

This Report seeks to address the question of whether or not non-Whites and White women received disparate treatment in the economy relative to White males. From a statistical viewpoint, this primary question has two sub-questions:

- What is the relationship between the independent variable and the dependent variable?
- What is the probability that the relationship between the independent variable and the dependent variable is equal to zero?

For example, an important question facing the City of Charlotte as it explores whether each racial and ethnic group and White women continue to experience discrimination in its markets is do non-Whites and White women receive lower wages than White men? As discussed in Appendix A, one way to uncover the relationship between the dependent variable (e.g., wages) and the independent variable (e.g., non-Whites) is through multiple regression analysis. An example helps to explain this concept.

Let us say, for example, that this analysis determines that non-Whites receive wages that are 35 percent less than White men after controlling for other factors, such as education and industry, which might account for the differences in wages. However, this finding is only an estimate of the relationship between the independent variable (e.g., non-Whites) and the dependent variable (e.g., wages) – the first sub-question. It is still important to determine how accurate the estimation is. In other words, what is the probability that the estimated relationship is equal to zero – the second sub-question.

To resolve the second sub-question, statistical hypothesis tests are utilized. Hypothesis testing assumes that there is no relationship between belonging to a particular demographic group and the level of economic utilization relative to White men (e.g., non-Whites earn identical wages compared to White men or non-Whites earn 0 percent less than White men). This sometimes is called the null hypothesis. We then calculate a confidence interval to find the probability that the observed relationship (e.g., -35 percent) is between 0 and minus that confidence interval.²⁹⁶ The confidence interval will vary depending upon the level of confidence (statistical significance) we wish to have in our conclusion. When a number is statistically significant at the 0.001 level, this indicates that we can be 99.9 percent certain that the number in question (in this example, -35 percent) lies outside of the confidence interval. When a number is statistically significant at the 0.01 level, this indicates that we can be 99.0 percent certain that the number in the seam be 99.0 percent certain that the number is statistically significant at the 0.05 level, this indicates that we can be 95.0 percent certain that the number in question lies outside of the confidence interval.

^{296.} Because 0 can only be greater than -35 percent, we only speak of "minus the confidence level". This is a one-tailed hypothesis test. If, in another example, the observed relationship could be above or below the hypothesized value, then we would say "plus or minus the confidence level" and this would be a two-tailed test.

APPENDIX D: UNWEIGHTED AND WEIGHTED AVAILABILITY

Central to the analysis, under strict constitutional scrutiny, of an agency's contracting activity is understanding what firms could have received contracts. Availability has two components: unweighted availability and weighted availability. Below we define these two terms; why we make the distinction; and how to convert unweighted availability into weighted availability.

Defining Unweighted and Weighted Availability

Unweighted availability measures a group's share of all firms that could receive a contract or subcontract. If 100 firms could receive a contract and 15 of these firms are minority-owned, then MBE unweighted availability is 15 percent (15/100). Weighted availability converts the unweighted availability through the use of a weighting factor: the share of total agency spending in a particular NAICS code. If total agency spending is \$1,000,000 and NAICS Code AAAAAA captures \$100,000 of the total spending, then the weighting factor for NAICS code AAAAAA is 10 percent (\$100,000/\$1,000,000).

Why Weight the Unweighted Availability

It is important to understand *why* weighted availability should be calculated. A disparity study examines the overall contracting activity of an agency by looking at the firms that *received* contracts and the firms that *could have received* contracts. A proper analysis does not allow activity in a NAICS code that is not important an agency's overall spending behavior to have a disproportionate impact on the analysis. In other words, the availability of a certain group in a specific NAICS code in which the agency spends few of its dollars should have less importance to the analysis than the availability of a certain group in another NAICS code where the agency spends a large share of its dollars.

To account for these differences, the availability in each NAICS code is weighted by the agency's spending in the code. The calculation of the weighted availability compares the firms that received contracts (utilization) and the firms that could receive contracts (availability). Utilization is a group's share of total spending by an agency; this metric is measure in dollars, *i.e.*, MBEs received 8 percent of all dollars spent by the agency. Since utilization is measured in dollars, availability must be measures in dollars to permit an "apples-to-apples" comparison.

How to Calculate the Weighted Availability

Three steps are involved in converting unweighted availability into weighted availability:

- Determine the unweighted availability
- Determine the weights for each NAICS code
- Apply the weights to the unweighted availability to calculate weighted availability

The following is a hypothetical calculation.

Table A contains data on unweighted availability measured by the number of firms:

NAICS	Black	Hispanic	Asian	Native American	White Women	Non- M/W/DBE	Total
AAAAA	10	20	20	5	15	400	470
BBBBBB	20	15	15	4	16	410	480
СССССС	10	10	18	3	17	420	478
TOTAL	40	45	53	12	48	1230	1428

Table A

Unweighted availability measured as the share of firms requires us to divide the number of firms in each group by the total number of firms (the last column in Table A). For example, the Black share of total firms in NAICS code AAAAAA is 2.1 percent (10/470). Table B presents the unweighted availability measure as a group's share of all firms.

NAICS	Black	Hispanic	Asian	Native American	White Women	Non- M/W/DBE	Total
AAAAAA	2.1%	4.3%	4.3%	1.1%	3.2%	85.1%	100.0%

Table B

NAICS	Black	Hispanic	Asian	Native American	White Women	Non- M/W/DBE	Total
BBBBBB	4.2%	3.1%	3.1%	0.8%	3.3%	85.4%	100.0%
СССССС	2.1%	2.1%	3.8%	0.6%	3.6%	87.9%	100.0%
TOTAL	2.8%	3.2%	3.7%	0.8%	3.4%	86.1%	100.0%

Table C presents data on the agency's spending in each NAICS code:

	Table C	
NAICS	Total Dollars	Share
ΑΑΑΑΑ	\$1,000.00	22.2%
BBBBBB	\$1,500.00	33.3%
СССССС	\$2,000.00	44.4%
TOTAL	\$4,500.00	100.0%

Each NAICS code's share of total agency spending (the last column in Table C) is the weight from each NAICS code that will be used in calculating the weighted availability. To calculate the overall weighted availability for each group, we first derive the every NAICS code component of a group's overall weighted availability. This is done by multiplying the NAICS code weight by the particular group's unweighted availability in that NAICS code. For instance, to determine NAICS code AAAAAA's component of the overall Black weighted availability, we would multiply 22.2 percent (the NAICS code weight) by 2.1 percent (the Black unweighted availability in NAICS code AAAAAA). The resulting number is 0.005 and this number is found in Table D under the cell which presents NAICS code AAAAAA's share of the Black weighted availability. The procedure is repeated for each group in each NAICS code. The calculation is completed by adding up each NAICS component for a particular group to calculate that group's overall weighted availability. Table D presents this information:

Table D

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/ DBE
ААААА	0.005	0.009	0.009	0.002	0.007	0.189
BBBBBB	0.014	0.010	0.010	0.003	0.011	0.285
СССССС	0.009	0.009	0.017	0.003	0.016	0.391
TOTAL	0.028	0.029	0.037	0.008	0.034	0.864

To determine the overall *weighted availability*, the last row of Table D is converted into a percentage (*e.g.*, for the Black weighted availability: 0.028 * 100 = 2.8 percent). Table E presents these results.

Table E

Black	Hispanic	Asian	Native White American Wome		Non-MWBE	Total
2.8%	2.9%	3.7%	0.8%	3.4%	86.4%	100.0%

APPENDIX E: UTILIZATION, AVAILABILITY, AND DISPARITY RATIO ANALYSIS BY INDUSTRY

Upon request from the City, CHA disaggregated the utilization, availability and disparity analysis into four broad industry grouping:

- Construction
- Professional Services
- Services
- Goods

For each of these industries, we present the following tables:

- Distribution of Contract Dollars by Race and Gender (total dollars)
- Distribution of Contract Dollars by Race and Gender (share of total dollars)
- Unweighted M/WBE Availability for the City Contracts
- Distribution of the City Spending by NAICS Code (the Weights)
- Aggregated Weighted Availability for the City Contracts
- Disparity Ratios by Demographic Group

1. Construction

Table E-1: Construction - Distribution of Contract Dollars by Race and Gender (total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
236115	\$50,255	\$0	\$0	\$0	\$50,255	\$0	\$50,255	\$0	\$50,255
236210	\$2,253,877	\$0	\$0	\$0	\$2,253,877	\$6,012,960	\$8,266,837	\$35,427,075	\$43,693,912
236220	\$674,064	\$0	\$0	\$0	\$674,064	\$169,120	\$843,184	\$41,088,585	\$41,931,769
237110	\$44,960	\$484,555	\$0	\$5,844,659	\$6,374,174	\$19,528,212	\$25,902,386	\$159,743,627	\$185,646,013
237120	\$0	\$0	\$0	\$0	\$0	\$912,911	\$912,911	\$181,342	\$1,094,253
237130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,649	\$5,649
237310	\$937,863	\$3,142,520	\$1,044,918	\$0	\$5,125,301	\$16,114,033	\$21,239,334	\$228,406,272	\$249,645,606
237990	\$0	\$0	\$15,269,613	\$572,379	\$15,841,992	\$14,212	\$15,856,204	\$48,639,783	\$64,495,987
238110	\$292,494	\$0	\$0	\$0	\$292,494	\$516,547	\$809,041	\$22,807,987	\$23,617,028
238120	\$0	\$2,893,539	\$0	\$0	\$2,893,539	\$0	\$2,893,539	\$2,916,883	\$5,810,422
238130	\$0	\$194,314	\$0	\$0	\$194,314	\$0	\$194,314	\$500	\$194,814
238140	\$0	\$0	\$0	\$0	\$0	\$872,418	\$872,418	\$691,284	\$1,563,702
238150	\$217,976	\$0	\$0	\$576,107	\$794,082	\$222,759	\$1,016,841	\$61,700	\$1,078,541
238160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,049,952	\$1,049,952
238170	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,312	\$8,312
238190	\$0	\$36,499	\$0	\$0	\$36,499	\$0	\$36,499	\$1,547,411	\$1,583,910
238210	\$2,809,497	\$2,122,524	\$0	\$0	\$4,932,021	\$3,725,657	\$8,657,678	\$26,282,084	\$34,939,763
238220	\$322,744	\$0	\$0	\$95,910	\$418,654	\$1,096,480	\$1,515,134	\$12,971,488	\$14,486,622
238290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,922,984	\$9,922,984
238310	\$223,476	\$0	\$0	\$0	\$223,476	\$0	\$223,476	\$187,312	\$410,787

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
238320	\$47,665	\$298,278	\$0	\$0	\$345 <i>,</i> 943	\$70,250	\$416,193	\$538,610	\$954,803
238330	\$80,457	\$0	\$0	\$0	\$80,457	\$243,715	\$324,172	\$550,000	\$874,172
238340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225,000	\$225,000
238350	\$4,739	\$0	\$0	\$19,218	\$23,957	\$158,733	\$182,690	\$11,960	\$194,651
238390	\$0	\$256,624	\$0	\$0	\$256,624	\$170,933	\$427,557	\$1,693,839	\$2,121,397
238910	\$512,628	\$2,400	\$0	\$3,475,166	\$3,990,195	\$1,485,192	\$5,475,387	\$37,723,446	\$43,198,833
238990	\$105,473	\$7,535	\$0	\$447,842	\$560,850	\$1,934,359	\$2,495,209	\$6,229,395	\$8,724,604
423720	\$0	\$0	\$0	\$0	\$0	\$1,688,480	\$1,688,480	\$245,015	\$1,933,496
423810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160,000	\$160,000
423830	\$0	\$0	\$695,173	\$0	\$695,173	\$102	\$695,275	\$3,280,658	\$3,975,933
444190	\$0	\$120,000	\$0	\$0	\$120,000	\$2,066,707	\$2,186,707	\$20,877	\$2,207,584
484110	\$0	\$0	\$0	\$0	\$0	\$301,485	\$301,485	\$0	\$301,485
484220	\$11,357,110	\$1,138,097	\$42,676	\$901,934	\$13,439,816	\$3,301,993	\$16,741,809	\$1,594,592	\$18,336,401
532412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$492,909	\$492,909
Total	\$19,935,278	\$10,696,886	\$17,052,380	\$11,933,214	\$59,617,758	\$60,607,261	\$120,225,019	\$644,706,533	\$764,931,552

Source: CHA analysis of City of Charlotte data

Table E-2: Construction - Distribution of Contract Dollars by Race and Gender (share of total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
236115	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
236210	5.2%	0.0%	0.0%	0.0%	5.2%	13.8%	18.9%	81.1%	100.0%
236220	1.6%	0.0%	0.0%	0.0%	1.6%	0.4%	2.0%	98.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
237110	0.0%	0.3%	0.0%	3.1%	3.4%	10.5%	14.0%	86.0%	100.0%
237120	0.0%	0.0%	0.0%	0.0%	0.0%	83.4%	83.4%	16.6%	100.0%
237130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237310	0.4%	1.3%	0.4%	0.0%	2.1%	6.5%	8.5%	91.5%	100.0%
237990	0.0%	0.0%	23.7%	0.9%	24.6%	0.0%	24.6%	75.4%	100.0%
238110	1.2%	0.0%	0.0%	0.0%	1.2%	2.2%	3.4%	96.6%	100.0%
238120	0.0%	49.8%	0.0%	0.0%	49.8%	0.0%	49.8%	50.2%	100.0%
238130	0.0%	99.7%	0.0%	0.0%	99.7%	0.0%	99.7%	0.3%	100.0%
238140	0.0%	0.0%	0.0%	0.0%	0.0%	55.8%	55.8%	44.2%	100.0%
238150	20.2%	0.0%	0.0%	53.4%	73.6%	20.7%	94.3%	5.7%	100.0%
238160	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238190	0.0%	2.3%	0.0%	0.0%	2.3%	0.0%	2.3%	97.7%	100.0%
238210	8.0%	6.1%	0.0%	0.0%	14.1%	10.7%	24.8%	75.2%	100.0%
238220	2.2%	0.0%	0.0%	0.7%	2.9%	7.6%	10.5%	89.5%	100.0%
238290	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238310	54.4%	0.0%	0.0%	0.0%	54.4%	0.0%	54.4%	45.6%	100.0%
238320	5.0%	31.2%	0.0%	0.0%	36.2%	7.4%	43.6%	56.4%	100.0%
238330	9.2%	0.0%	0.0%	0.0%	9.2%	27.9%	37.1%	62.9%	100.0%
238340	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238350	2.4%	0.0%	0.0%	9.9%	12.3%	81.5%	93.9%	6.1%	100.0%
238390	0.0%	12.1%	0.0%	0.0%	12.1%	8.1%	20.2%	79.8%	100.0%
238910	1.2%	0.0%	0.0%	8.0%	9.2%	3.4%	12.7%	87.3%	100.0%
238990	1.2%	0.1%	0.0%	5.1%	6.4%	22.2%	28.6%	71.4%	100.0%
423720	0.0%	0.0%	0.0%	0.0%	0.0%	87.3%	87.3%	12.7%	100.0%
423810	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423830	0.0%	0.0%	17.5%	0.0%	17.5%	0.0%	17.5%	82.5%	100.0%
444190	0.0%	5.4%	0.0%	0.0%	5.4%	93.6%	99.1%	0.9%	100.0%
484110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
484220	61.9%	6.2%	0.2%	4.9%	73.3%	18.0%	91.3%	8.7%	100.0%
532412	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	2.6%	1.4%	2.2%	1.6%	7.8%	7.9%	15.7%	84.3%	100.0%

Source: CHA analysis of City of Charlotte data

Table E-3: Construction - Unweighted M/WBE Availability for the City Contracts

		1					,		
NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
236115	0.8%	0.3%	0.1%	0.2%	1.3%	1.7%	3.0%	97.0%	100.0%
236210	4.8%	0.5%	0.4%	0.5%	6.2%	10.6%	16.8%	83.2%	100.0%
236220	6.9%	1.5%	0.7%	1.6%	10.7%	7.2%	18.0%	82.0%	100.0%
237110	3.1%	1.2%	0.3%	1.2%	5.7%	8.9%	14.6%	85.4%	100.0%
237120	12.0%	0.0%	0.0%	4.3%	16.2%	5.1%	21.4%	78.6%	100.0%
237130	0.7%	3.4%	0.0%	0.0%	4.1%	6.8%	10.8%	89.2%	100.0%
237310	5.1%	1.5%	0.3%	0.8%	7.7%	9.5%	17.2%	82.8%	100.0%
237990	1.7%	1.2%	0.9%	1.4%	5.2%	9.5%	14.7%	85.3%	100.0%
238110	2.2%	2.4%	0.2%	0.2%	4.9%	3.1%	8.1%	91.9%	100.0%
238120	2.0%	9.3%	0.7%	2.0%	13.9%	10.6%	24.5%	75.5%	100.0%
238130	0.4%	0.2%	0.2%	0.1%	0.9%	2.2%	3.1%	96.9%	100.0%
238140	2.8%	1.3%	0.2%	0.3%	4.6%	2.5%	7.1%	92.9%	100.0%
238150	1.0%	1.0%	0.0%	1.7%	3.8%	8.4%	12.2%	87.8%	100.0%
238160	0.6%	0.3%	0.1%	0.2%	1.3%	2.9%	4.2%	95.8%	100.0%
238170	0.0%	0.2%	0.3%	0.0%	0.5%	3.8%	4.3%	95.7%	100.0%
238190	7.2%	5.4%	0.9%	1.8%	15.3%	7.2%	22.5%	77.5%	100.0%
238210	2.1%	0.6%	0.2%	0.5%	3.4%	4.3%	7.7%	92.3%	100.0%
238220	1.1%	0.2%	0.1%	0.2%	1.7%	2.7%	4.4%	95.6%	100.0%
238290	1.9%	0.0%	0.0%	0.5%	2.3%	5.6%	7.9%	92.1%	100.0%
238310	1.4%	1.4%	0.2%	0.6%	3.5%	3.7%	7.3%	92.7%	100.0%
238320	1.5%	0.7%	0.1%	0.1%	2.4%	2.4%	4.8%	95.2%	100.0%
238330	2.7%	0.3%	0.2%	0.0%	3.3%	4.6%	7.9%	92.1%	100.0%
238340	0.7%	0.6%	0.3%	0.1%	1.7%	3.2%	4.9%	95.1%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
238350	0.9%	0.6%	0.2%	0.3%	2.0%	2.7%	4.7%	95.3%	100.0%
238390	1.2%	0.6%	0.2%	0.0%	2.0%	2.0%	4.0%	96.0%	100.0%
238910	5.4%	0.4%	0.4%	1.4%	7.6%	11.4%	19.0%	81.0%	100.0%
238990	1.5%	0.8%	0.1%	0.2%	2.6%	3.3%	5.9%	94.1%	100.0%
423720	2.5%	0.0%	0.5%	0.0%	3.1%	9.7%	12.7%	87.3%	100.0%
423810	2.0%	1.0%	0.0%	0.0%	3.0%	5.3%	8.3%	91.7%	100.0%
423830	0.2%	0.3%	0.2%	0.0%	0.6%	4.0%	4.7%	95.3%	100.0%
444190	0.6%	0.7%	0.1%	0.2%	1.6%	5.9%	7.5%	92.5%	100.0%
484110	4.2%	0.3%	0.1%	0.1%	4.7%	3.1%	7.7%	92.3%	100.0%
484220	33.0%	3.3%	0.9%	1.2%	38.3%	13.0%	51.3%	48.7%	100.0%
532412	1.0%	0.0%	0.0%	0.5%	1.5%	8.7%	10.2%	89.8%	100.0%
Total	2.2%	0.6%	0.2%	0.3%	3.3%	3.4%	6.7%	93.3%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-4: Construction - Distribution of the City Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
236115	New Single-Family Housing Construction (except For-Sale Builders)	0.01%
236210	Industrial Building Construction	5.71%
236220	Commercial and Institutional Building Construction	5.48%
237110	Water and Sewer Line and Related Structures Construction	24.27%
237120	Oil and Gas Pipeline and Related Structures Construction	0.14%
237130	Power and Communication Line and Related Structures Construction	0.00%
237310	Highway, Street, and Bridge Construction	32.64%
237990	Other Heavy and Civil Engineering Construction	8.43%
238110	Poured Concrete Foundation and Structure Contractors	3.09%
238120	Structural Steel and Precast Concrete Contractors	0.76%
238130	Framing Contractors	0.03%
238140	Masonry Contractors	0.20%
238150	Glass and Glazing Contractors	0.14%
238160	Roofing Contractors	0.14%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
238170	Siding Contractors	0.00%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.21%
238210	Electrical Contractors and Other Wiring Installation Contractors	4.57%
238220	Plumbing, Heating, and Air-Conditioning Contractors	1.89%
238290	Other Building Equipment Contractors	1.30%
238310	Drywall and Insulation Contractors	0.05%
238320	Painting and Wall Covering Contractors	0.12%
238330	Flooring Contractors	0.11%
238340	Tile and Terrazzo Contractors	0.03%
238350	Finish Carpentry Contractors	0.03%
238390	Other Building Finishing Contractors	0.28%
238910	Site Preparation Contractors	5.65%
238990	All Other Specialty Trade Contractors	1.14%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0.25%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.02%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.52%
444190	Other Building Material Dealers	0.29%
484110	General Freight Trucking, Local	0.04%
484220	Specialized Freight (except Used Goods) Trucking, Local	2.40%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0.06%
236115	New Single-Family Housing Construction (except For-Sale Builders)	0.01%
236210	Industrial Building Construction	5.71%
236220	Commercial and Institutional Building Construction	5.48%
237110	Water and Sewer Line and Related Structures Construction	24.27%
237120	Oil and Gas Pipeline and Related Structures Construction	0.14%
237130	Power and Communication Line and Related Structures Construction	0.00%
237310	Highway, Street, and Bridge Construction	32.64%
237990	Other Heavy and Civil Engineering Construction	8.43%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
238110	Poured Concrete Foundation and Structure Contractors	3.09%
238120	Structural Steel and Precast Concrete Contractors	0.76%
238130	Framing Contractors	0.03%
238140	Masonry Contractors	0.20%
238150	Glass and Glazing Contractors	0.14%
238160	Roofing Contractors	0.14%
238170	Siding Contractors	0.00%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.21%
238210	Electrical Contractors and Other Wiring Installation Contractors	4.57%
238220	Plumbing, Heating, and Air-Conditioning Contractors	1.89%
238290	Other Building Equipment Contractors	1.30%
238310	Drywall and Insulation Contractors	0.05%
238320	Painting and Wall Covering Contractors	0.12%
238330	Flooring Contractors	0.11%
238340	Tile and Terrazzo Contractors	0.03%
238350	Finish Carpentry Contractors	0.03%
238390	Other Building Finishing Contractors	0.28%
238910	Site Preparation Contractors	5.65%
238990	All Other Specialty Trade Contractors	1.14%
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0.25%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0.02%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.52%
444190	Other Building Material Dealers	0.29%
484110	General Freight Trucking, Local	0.04%
484220	Specialized Freight (except Used Goods) Trucking, Local	2.40%
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0.06%
TOTAL		100.0%

Source: CHA analysis of City of Charlotte data

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
4.6%	1.3%	0.4%	1.0%	7.2%	8.7%	15.9%	84.1%	100.0%

Table E-5: Construction - Aggregated Weighted Availability for the City Contracts

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-6: Construction - Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	56.6% [‡]	107.9%	587.4%	161.4%	107.6%	91.4%	98.8%	100.2%

Source: CHA analysis of City of Charlotte data ‡ Indicates substantive significance

2. Professional Services

Table E-7: Professional Services - Distribution of Contract Dollars by Race and Gender (total dollars)

	Table L-7. Professional Services - Distribution of Contract Donars by Race and Gender (total donars)										
NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total		
531210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$255,386	\$255,386		
531320	\$0	\$0	\$0	\$0	\$0	\$9 <i>,</i> 450	\$9,450	\$367,169	\$376,619		
541110	\$101,204	\$0	\$0	\$0	\$101,204	\$0	\$101,204	\$361,024	\$462,228		
541211	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,502	\$23,502		
541310	\$209,920	\$320,904	\$0	\$0	\$530,824	\$0	\$530,824	\$4,766,305	\$5,297,129		
541320	\$26,685	\$0	\$0	\$0	\$26,685	\$0	\$26,685	\$3,343,663	\$3,370,347		
541330	\$467,788	\$48,140	\$41,748	\$541,301	\$1,098,977	\$376,644	\$1,475,621	\$69,864,399	\$71,340,020		
541350	\$300,685	\$0	\$0	\$0	\$300,685	\$0	\$300,685	\$321,517	\$622,202		
541370	\$0	\$15,728	\$34,350	\$0	\$50 <i>,</i> 078	\$2,184,023	\$2,234,101	\$3,540,553	\$5,774,653		
541380	\$601,193	\$0	\$0	\$0	\$601,193	\$83,767	\$684,960	\$4,388,527	\$5,073,487		
541420	\$18,300	\$0	\$0	\$0	\$18,300	\$0	\$18,300	\$0	\$18,300		
541430	\$0	\$0	\$24,645	\$0	\$24,645	\$202,175	\$226,820	\$0	\$226,820		
541490	\$0	\$0	\$0	\$0	\$0	\$8,258	\$8,258	\$0	\$8,258		
541511	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$735,511	\$735,511		
541512	\$0	\$46,300	\$0	\$0	\$46,300	\$50,000	\$96,300	\$57,664	\$153,964		
541519	\$0	\$0	\$5,970,614	\$0	\$5,970,614	\$0	\$5,970,614	\$0	\$5,970,614		
541620	\$0	\$108,826	\$0	\$0	\$108,826	\$175,680	\$284,506	\$2,632,544	\$2,917,050		
541690	\$0	\$0	\$0	\$0	\$0	\$6,000	\$6,000	\$11,810	\$17,810		
541990	\$159,130	\$5,033	\$0	\$0	\$164,163	\$49,818	\$213,981	\$601,600	\$815,581		
Total	\$1,884,905	\$544,931	\$6,071,358	\$541,301	\$9,042,495	\$3,145,814	\$12,188,309	\$91,271,172	\$103,459,480		

Source: CHA analysis of City of Charlotte data

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
531210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
531320	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%	97.5%	100.0%
541110	21.9%	0.0%	0.0%	0.0%	21.9%	0.0%	21.9%	78.1%	100.0%
541211	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541310	4.0%	6.1%	0.0%	0.0%	10.0%	0.0%	10.0%	90.0%	100.0%
541320	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.8%	99.2%	100.0%
541330	0.7%	0.1%	0.1%	0.8%	1.5%	0.5%	2.1%	97.9%	100.0%
541350	48.3%	0.0%	0.0%	0.0%	48.3%	0.0%	48.3%	51.7%	100.0%
541370	0.0%	0.3%	0.6%	0.0%	0.9%	39.3%	40.2%	59.8%	100.0%
541380	11.8%	0.0%	0.0%	0.0%	11.8%	1.7%	13.5%	86.5%	100.0%
541420	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541430	0.0%	0.0%	10.9%	0.0%	10.9%	89.1%	100.0%	0.0%	100.0%
541490	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541511	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541512	0.0%	30.1%	0.0%	0.0%	30.1%	32.5%	62.5%	37.5%	100.0%
541519	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541620	0.0%	3.7%	0.0%	0.0%	3.7%	6.0%	9.8%	90.2%	100.0%
541690	0.0%	0.0%	0.0%	0.0%	0.0%	33.7%	33.7%	66.3%	100.0%
541990	19.5%	0.6%	0.0%	0.0%	20.1%	6.1%	26.2%	73.8%	100.0%
Total	1.8%	0.5%	5.9%	0.5%	8.7%	3.0%	11.8%	88.2%	100.0%

Table E-8: Professional Services - Distribution of Contract Dollars by Race and Gender(share of total dollars)

Source: CHA analysis of City of Charlotte data

Table E-9: Professional Services - Unweighted M/WBE Availability for the City Contracts

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
531210	0.7%	0.0%	0.1%	0.0%	0.8%	4.8%	5.6%	94.4%	100.0%
531320	1.0%	0.1%	0.0%	0.0%	1.1%	9.2%	10.3%	89.7%	100.0%
541110	0.6%	0.0%	0.0%	0.0%	0.7%	5.5%	6.2%	93.8%	100.0%
541211	0.9%	0.1%	0.1%	0.0%	1.1%	9.7%	10.8%	89.2%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
541310	2.1%	1.7%	0.6%	0.2%	4.6%	7.1%	11.7%	88.3%	100.0%
541320	1.2%	0.2%	0.2%	0.1%	1.6%	2.8%	4.4%	95.6%	100.0%
541330	3.6%	1.2%	1.2%	0.9%	6.8%	5.6%	12.4%	87.6%	100.0%
541350	2.8%	0.6%	0.4%	0.4%	4.1%	3.1%	7.2%	92.8%	100.0%
541370	1.2%	0.9%	1.2%	0.7%	4.1%	5.0%	9.1%	90.9%	100.0%
541380	1.1%	0.2%	0.6%	0.6%	2.5%	4.9%	7.4%	92.6%	100.0%
541420	6.8%	1.7%	0.0%	1.7%	10.2%	20.3%	30.5%	69.5%	100.0%
541430	2.8%	0.3%	0.1%	0.2%	3.4%	14.9%	18.3%	81.7%	100.0%
541490	10.8%	0.9%	0.0%	0.0%	11.7%	24.3%	36.0%	64.0%	100.0%
541511	2.6%	0.3%	1.8%	0.3%	5.0%	4.0%	8.9%	91.1%	100.0%
541512	4.6%	0.7%	2.1%	0.6%	7.9%	5.9%	13.8%	86.2%	100.0%
541519	15.1%	1.1%	2.2%	1.7%	20.1%	5.0%	25.1%	74.9%	100.0%
541620	2.3%	0.5%	2.5%	0.7%	5.9%	11.5%	17.4%	82.6%	100.0%
541690	4.7%	1.4%	1.8%	0.3%	8.1%	9.1%	17.2%	82.8%	100.0%
541990	1.0%	0.1%	0.2%	0.0%	1.4%	4.6%	6.0%	94.0%	100.0%
Total	1.4%	0.3%	0.4%	0.1%	2.2%	5.4%	7.7%	92.3%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-10: Professional Services - Distribution of the City Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
531210	Offices of Real Estate Agents and Brokers	0.2%
531320	Offices of Real Estate Appraisers	0.4%
541110	Offices of Lawyers	0.4%
541211	Offices of Certified Public Accountants	0.02%
541310	Architectural Services	5.1%
541320	Landscape Architectural Services	3.3%
541330	Engineering Services	69.0%
541350	Building Inspection Services	0.6%
541370	Surveying and Mapping (except Geophysical) Services	5.6%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
541380	Testing Laboratories	4.9%
541420	Industrial Design Services	0.02%
541430	Graphic Design Services	0.2%
541490	Other Specialized Design Services	0.0%
541511	Custom Computer Programming Services	0.7%
541512	Computer Systems Design Services	0.1%
541519	Other Computer Related Services	5.8%
541620	Environmental Consulting Services	2.8%
541690	Other Scientific and Technical Consulting Services	0.02%
541990	All Other Professional, Scientific, and Technical Services	0.8%
TOTAL		100.0%

Table E-11: Professional Services - Aggregated Weighted Availability for the City Contracts

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
3.7%	1.1%	1.2%	0.8%	6.8%	5.7%	12.4%	87.6%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-12: Professional Services - Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	48.6% [‡]	50.1% [‡]	504.7%	65.6% [‡]	129.3%	53.6% [‡]	94.7%	100.7%

Source: CHA analysis of City of Charlotte data ‡ Indicates substantive significance

3. Services

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
481219	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,472,480	\$63,472,480
488119	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$715,505	\$715,505
488410	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,632	\$68,632
488490	\$0	\$0	\$0	\$0	\$0	\$4,794	\$4,794	\$454,014	\$458,808
512191	\$10,100	\$0	\$0	\$0	\$10,100	\$0	\$10,100	\$0	\$10,100
517311	\$0	\$0	\$0	\$0	\$0	\$562	\$562	\$0	\$562
517911	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$430,990	\$430,990
518210	\$0	\$0	\$0	\$0	\$0	\$15,156	\$15,156	\$0	\$15,156
524114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,294,000	\$135,294,000
541611	\$430,569	\$0	\$0	\$0	\$430,569	\$42,098	\$472,667	\$3,881,234	\$4,353,900
541612	\$0	\$0	\$0	\$0	\$0	\$158,768	\$158,768	\$0	\$158,768
541613	\$0	\$0	\$0	\$0	\$0	\$94,472	\$94,472	\$147,782	\$242,254
541614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,623	\$49,623
541618	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800	\$2,800
541810	\$0	\$0	\$0	\$0	\$0	\$207,755	\$207,755	\$0	\$207,755
541820	\$34,800	\$0	\$0	\$0	\$34,800	\$316,372	\$351,172	\$740,196	\$1,091,368
541840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,575	\$54,575
541910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000	\$95,000
541921	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,877	\$1,877
541922	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,123	\$6,123

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
561110	\$0	\$0	\$0	\$0	\$0	\$83,650	\$83,650	\$909,104	\$992,754
561311	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130,500	\$130,500
561320	\$11,313	\$0	\$0	\$0	\$11,313	\$49,500	\$60,813	\$31,511	\$92,324
561330	\$0	\$0	\$0	\$0	\$0	\$70,057	\$70,057	\$49,516	\$119,573
561421	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$143,671	\$143,671
561440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,128	\$3,128
561612	\$38,564	\$0	\$0	\$0	\$38,564	\$225,600	\$264,164	\$2,356,466	\$2,620,630
561621	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,490,833	\$1,490,833
561710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$306,426	\$306,426
561720	\$399,811	\$0	\$0	\$0	\$399,811	\$946,735	\$1,346,546	\$4,675	\$1,351,222
561730	\$2,455,677	\$106,731	\$0	\$620,428	\$3,182,835	\$3,560,105	\$6,742,940	\$5,018,312	\$11,761,252
561790	\$1,584,261	\$0	\$0	\$0	\$1,584,261	\$0	\$1,584,261	\$0	\$1,584,261
561920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$122,101	\$122,101
561990	\$1,618,196	\$0	\$40,728	\$1,550	\$1,660,473	\$206,401	\$1,866,874	\$1,103,762	\$2,970,637
562111	\$37,921	\$0	\$0	\$90,359	\$128,280	\$30,840	\$159,120	\$210,724	\$369,845
562112	\$346,000	\$0	\$0	\$0	\$346,000	\$2,203	\$348,203	\$0	\$348,203
562212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,762	\$209,762
562910	\$0	\$0	\$0	\$0	\$0	\$178,710	\$178,710	\$2,071,516	\$2,250,226
562991	\$386,934	\$0	\$0	\$0	\$386,934	\$0	\$386,934	\$174	\$387,108
562998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,950,000	\$4,950,000
611430	\$125,736	\$0	\$0	\$0	\$125,736	\$73,800	\$199,536	\$60,000	\$259,536
621910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,944,899	\$1,944,899
722320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,909	\$100,909

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NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
811111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,727,487	\$1,727,487
811121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$442,000	\$442,000
811192	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,679	\$247,679
811213	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$775,577	\$775,577
811310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,852,870	\$4,852,870
Total	\$7,479,881	\$106,731	\$40,728	\$712,336	\$8,339,676	\$6,267,578	\$14,607,254	\$234,678,433	\$249,285,687

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
481219	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
488119	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
488410	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
488490	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	99.0%	100.0%
512191	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
517311	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
517911	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
524114	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541611	9.9%	0.0%	0.0%	0.0%	9.9%	1.0%	10.9%	89.1%	100.0%
541612	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541613	0.0%	0.0%	0.0%	0.0%	0.0%	39.0%	39.0%	61.0%	100.0%
541614	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541618	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541810	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541820	3.2%	0.0%	0.0%	0.0%	3.2%	29.0%	32.2%	67.8%	100.0%
541840	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541921	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541922	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561110	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	8.4%	91.6%	100.0%
561311	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561320	12.3%	0.0%	0.0%	0.0%	12.3%	53.6%	65.9%	34.1%	100.0%
561330	0.0%	0.0%	0.0%	0.0%	0.0%	58.6%	58.6%	41.4%	100.0%
561421	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561440	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561612	1.5%	0.0%	0.0%	0.0%	1.5%	8.6%	10.1%	89.9%	100.0%
561621	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Table E-14: Services - Distribution of Contract Dollars by Race and Gender (share of total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
561710	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561720	29.6%	0.0%	0.0%	0.0%	29.6%	70.1%	99.7%	0.3%	100.0%
561730	20.9%	0.9%	0.0%	5.3%	27.1%	30.3%	57.3%	42.7%	100.0%
561790	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
561920	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561990	54.5%	0.0%	1.4%	0.1%	55.9%	6.9%	62.8%	37.2%	100.0%
562111	10.3%	0.0%	0.0%	24.4%	34.7%	8.3%	43.0%	57.0%	100.0%
562112	99.4%	0.0%	0.0%	0.0%	99.4%	0.6%	100.0%	0.0%	100.0%
562212	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
562910	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	7.9%	92.1%	100.0%
562991	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
562998	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
611430	48.4%	0.0%	0.0%	0.0%	48.4%	28.4%	76.9%	23.1%	100.0%
621910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
722320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811111	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811121	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811192	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811213	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	3.0%	0.0%	0.0%	0.3%	3.3%	2.5%	5.9%	94.1%	100.0%

Table E-15: Services - Unweighted M/WBE Availability for the City Contracts

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
481219	9.4%	0.0%	0.0%	0.0%	9.4%	1.2%	10.6%	89.4%	100.0%
488119	0.1%	0.0%	0.1%	0.1%	0.3%	0.8%	1.1%	98.9%	100.0%
488410	1.0%	0.1%	0.0%	0.0%	1.0%	3.7%	4.7%	95.3%	100.0%
488490	13.3%	0.4%	0.0%	0.4%	14.2%	10.8%	25.0%	75.0%	100.0%
512191	1.5%	0.0%	0.0%	0.4%	1.9%	4.2%	6.0%	94.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
517311	0.8%	0.8%	0.4%	0.0%	2.0%	5.2%	7.2%	92.8%	100.0%
517911	1.0%	0.7%	0.2%	0.2%	2.0%	3.1%	5.1%	94.9%	100.0%
518210	2.3%	0.4%	0.7%	0.7%	4.2%	8.4%	12.6%	87.4%	100.0%
524114	0.0%	0.0%	0.0%	0.7%	0.7%	7.3%	7.9%	92.1%	100.0%
541611	5.2%	0.4%	0.4%	0.3%	6.2%	7.7%	13.9%	86.1%	100.0%
541612	10.5%	1.3%	0.6%	0.4%	12.8%	17.2%	30.0%	70.0%	100.0%
541613	2.2%	0.2%	0.2%	0.1%	2.6%	4.4%	7.0%	93.0%	100.0%
541614	17.7%	0.4%	1.6%	0.4%	20.1%	10.0%	30.1%	69.9%	100.0%
541618	2.0%	0.2%	0.3%	0.1%	2.6%	3.7%	6.3%	93.7%	100.0%
541810	2.2%	0.5%	0.0%	0.1%	2.8%	14.6%	17.4%	82.6%	100.0%
541820	4.3%	0.5%	0.0%	0.0%	4.9%	12.9%	17.8%	82.2%	100.0%
541840	8.1%	0.0%	0.0%	0.9%	9.0%	7.2%	16.2%	83.8%	100.0%
541910	4.7%	0.0%	0.3%	0.0%	5.1%	10.3%	15.3%	84.7%	100.0%
541921	0.5%	0.1%	0.0%	0.0%	0.6%	5.9%	6.4%	93.6%	100.0%
541922	1.8%	0.4%	0.1%	0.1%	2.5%	6.4%	8.9%	91.1%	100.0%
561110	1.5%	0.1%	0.2%	0.1%	1.9%	2.2%	4.1%	95.9%	100.0%
561311	4.2%	0.5%	0.7%	0.3%	5.7%	6.8%	12.5%	87.5%	100.0%
561320	3.7%	0.0%	0.9%	0.4%	5.1%	11.5%	16.5%	83.5%	100.0%
561330	21.1%	0.0%	5.3%	0.0%	26.3%	10.5%	36.8%	63.2%	100.0%
561421	1.6%	0.3%	0.0%	0.0%	2.0%	6.2%	8.1%	91.9%	100.0%
561440	2.9%	0.0%	0.0%	0.0%	2.9%	3.5%	6.4%	93.6%	100.0%
561612	6.1%	0.2%	0.4%	0.6%	7.3%	4.2%	11.5%	88.5%	100.0%
561621	3.1%	0.4%	0.6%	0.4%	4.6%	3.6%	8.2%	91.8%	100.0%
561710	0.5%	0.4%	0.0%	0.1%	0.9%	3.7%	4.6%	95.4%	100.0%
561720	7.0%	0.3%	0.4%	0.1%	7.8%	7.8%	15.6%	84.4%	100.0%
561730	2.0%	0.3%	0.1%	0.2%	2.6%	2.9%	5.5%	94.5%	100.0%
561790	3.1%	0.3%	0.0%	0.1%	3.5%	4.2%	7.7%	92.3%	100.0%
561920	6.6%	0.0%	0.0%	0.0%	6.6%	13.2%	19.7%	80.3%	100.0%
561990	2.8%	0.2%	0.2%	0.2%	3.3%	4.1%	7.4%	92.6%	100.0%
562111	14.8%	1.9%	0.0%	1.9%	18.5%	3.7%	22.2%	77.8%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
562112	35.7%	0.0%	7.1%	21.4%	64.3%	7.1%	71.4%	28.6%	100.0%
562212	0.3%	0.3%	0.0%	0.0%	0.6%	2.8%	3.4%	96.6%	100.0%
562910	8.3%	1.7%	1.7%	3.3%	14.9%	10.7%	25.6%	74.4%	100.0%
562991	0.9%	0.0%	0.0%	0.6%	1.5%	5.2%	6.7%	93.3%	100.0%
562998	2.5%	0.0%	2.5%	5.0%	10.0%	10.0%	20.0%	80.0%	100.0%
611430	38.2%	10.9%	0.0%	0.0%	49.1%	23.6%	72.7%	27.3%	100.0%
621910	4.1%	0.0%	0.0%	0.0%	4.1%	3.7%	7.7%	92.3%	100.0%
722320	3.3%	0.1%	0.0%	0.0%	3.3%	8.9%	12.2%	87.8%	100.0%
811111	0.3%	0.0%	0.0%	0.0%	0.5%	1.6%	2.0%	98.0%	100.0%
811121	0.5%	0.2%	0.1%	0.1%	0.8%	2.5%	3.3%	96.7%	100.0%
811192	1.9%	0.1%	0.0%	0.0%	2.0%	1.8%	3.8%	96.2%	100.0%
811213	0.0%	1.3%	0.0%	0.0%	1.3%	6.7%	8.0%	92.0%	100.0%
811310	0.3%	0.5%	0.1%	0.1%	0.9%	3.0%	3.9%	96.1%	100.0%
Total	2.6%	0.2%	0.2%	0.1%	3.2%	4.4%	7.6%	92.4%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-16: Services - Distribution of the City Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
481219	Other Nonscheduled Air Transportation	25.5%
488119	Other Airport Operations	0.3%
488410	Motor Vehicle Towing	0.03%
488490	Other Support Activities for Road Transportation	0.2%
512191	Teleproduction and Other Postproduction Services	0.00%
517311	Wired Telecommunications Carriers	0.00%
517911	Telecommunications Resellers	0.2%
518210	Data Processing, Hosting, and Related Services	0.01%
524114	Direct Health and Medical Insurance Carriers	54.3%
541611	Administrative Management and General Management Consulting Services	1.7%
541612	Human Resources Consulting Services	0.1%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)		
541613	Marketing Consulting Services	0.1%		
541614	Process, Physical Distribution, and Logistics Consulting Services	0.02%		
541618	Other Management Consulting Services	0.001%		
541810	Advertising Agencies	0.1%		
541820	Public Relations Agencies	0.4%		
541840	Media Representatives	0.02%		
541910	Marketing Research and Public Opinion Polling	0.04%		
541921	Photography Studios, Portrait	0.001%		
541922	Commercial Photography	0.002%		
561110	Office Administrative Services	0.4%		
561311	Employment Placement Agencies	0.1%		
561320	Temporary Help Services	0.04%		
561330	Professional Employer Organizations	0.05%		
561421	Telephone Answering Services	0.1%		
561440	Collection Agencies	0.001%		
561612	Security Guards and Patrol Services	1.1%		
561621	Security Systems Services (except Locksmiths)	0.6%		
561710	Exterminating and Pest Control Services	0.1%		
561720	Janitorial Services	0.5%		
561730	Landscaping Services	4.7%		
561790	Other Services to Buildings and Dwellings	0.6%		
561920	Convention and Trade Show Organizers	0.05%		
561990	All Other Support Services	1.2%		
562111	Solid Waste Collection	0.1%		
562112	Hazardous Waste Collection	0.1%		
562212	Solid Waste Landfill	0.1%		
562910	Remediation Services	0.9%		
562991	Septic Tank and Related Services	0.2%		
562998	All Other Miscellaneous Waste Management Services	2.0%		
611430	Professional and Management Development Training	0.1%		

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
621910	Ambulance Services	0.8%
722320	Caterers	0.04%
811111	General Automotive Repair	0.7%
811121	Automotive Body, Paint, and Interior Repair and Maintenance	0.2%
811192	Car Washes	0.1%
811213	Communication Equipment Repair and Maintenance	0.3%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1.9%
TOTAL		100.0%

Table E-17: Services - Aggregated Weighted Availability for the City Contracts

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
3.1%	0.1%	0.1%	0.6%	3.9%	5.3%	9.2%	90.8%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-18: Services - Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	96.1%	53.2% [‡]	15.4% [‡]	51.3% [‡]	86.5%	47.1% [‡]	63.7% [‡]	103.7%

Source: CHA analysis of City of Charlotte data

‡ Indicates substantive significance

4. Goods

Table E-19: Goods - Distribution of Contract Dollars k	v Race and Gender	(total dollars)
	y nade and denaer	

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
315210	\$0.0	\$0.0	\$228,843.0	\$0.0	\$228,843.0	\$0.0	\$228,843.0	\$0.0	\$228,843.0
323111	\$0.0	\$0.0	\$198.0	\$0.0	\$198.0	\$0.0	\$198.0	\$604,493.0	\$604,692.0
335910	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$181,095.0	\$181,095.0
336350	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$376,048.0	\$376,048.0
423110	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8,128,559.0	\$8,128,559.0
423120	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$11,136,529.0	\$11,136,529.0
423210	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$52,913.0	\$52,913.0
423320	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,129,877.0	\$1,129,877.0
423390	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$121,986.0	\$121,986.0
423440	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,963.0	\$2,963.0	\$30,242.0	\$33,206.0
423450	\$0.0	\$0.0	\$99,000.0	\$0.0	\$99,000.0	\$0.0	\$99,000.0	\$169,606.0	\$268,606.0
423510	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,839,053.0	\$1,839,053.0
423610	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$402,510.0	\$402,510.0	\$485,773.0	\$888,283.0
423690	\$34,199.0	\$0.0	\$0.0	\$0.0	\$34,199.0	\$343,032.0	\$377,231.0	\$0.0	\$377,232.0
423730	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$60,290.0	\$60,290.0
423850	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$721,452.0	\$721,452.0
423910	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$287,982.0	\$287,982.0
423990	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13,167.0	\$13,167.0	\$608,121.0	\$621,288.0
424130	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$507,685.0	\$507,685.0
424210	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$63,422.0	\$63,422.0

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
424320	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$58,487.0	\$58,487.0
424330	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$213,474.0	\$213,474.0
424590	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$266,200.0	\$266,200.0
424690	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$70,357.0	\$70,357.0	\$104,563.0	\$174,920.0
424710	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,306,610.0	\$4,306,610.0
424720	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$121,594.0	\$121,594.0
424910	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$263,278.0	\$263,278.0
424990	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$59,258.0	\$59,258.0
441110	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$600,000.0	\$600,000.0	\$16,382,622.0	\$16,982,622.0
441228	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,829,481.0	\$2,829,481.0
441310	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$600,000.0	\$600,000.0
444130	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$95,000.0	\$95,000.0
446110	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$61,545,836.0	\$61,545,836.0
512110	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,240.0	\$10,240.0	\$106,551.0	\$116,791.0
532112	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$123,102.0	\$123,102.0
532310	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$26,513.0	\$26,513.0
Total	\$34,199.0	\$0.0	\$328,041.0	\$0.0	\$362,240.0	\$1,442,270.0	\$1,804,510.0	\$113,607,696.0	\$115,412,206.0

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
315210	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
323111	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
335910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
336350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423120	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423390	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423440	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	8.9%	91.1%	100.0%
423450	0.0%	0.0%	36.9%	0.0%	36.9%	0.0%	36.9%	63.1%	100.0%
423510	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423610	0.0%	0.0%	0.0%	0.0%	0.0%	45.3%	45.3%	54.7%	100.0%
423690	9.1%	0.0%	0.0%	0.0%	9.1%	90.9%	100.0%	0.0%	100.0%
423730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423850	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423990	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	97.9%	100.0%
424130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424590	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424690	0.0%	0.0%	0.0%	0.0%	0.0%	40.2%	40.2%	59.8%	100.0%
424710	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
424990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Table E-20: Goods - Distribution of Contract Dollars by Race and Gender (share of total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
441110	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	3.5%	96.5%	100.0%
441228	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
441310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
444130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
446110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
512110	0.0%	0.0%	0.0%	0.0%	0.0%	8.8%	8.8%	91.2%	100.0%
532112	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
532310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	0.0%	0.0%	0.3%	0.0%	0.3%	1.2%	1.6%	98.4%	100.0%

Table E-21: Goods - Unweighted M/WBE Availability for the City Contracts

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
315210	0.0%	0.0%	4.8%	0.0%	4.8%	4.8%	9.5%	90.5%	100.0%
323111	1.2%	0.3%	0.3%	0.3%	2.1%	7.6%	9.7%	90.3%	100.0%
335910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
336350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423110	0.4%	0.0%	0.0%	0.0%	0.4%	2.8%	3.3%	96.7%	100.0%
423120	0.5%	0.0%	0.1%	0.1%	0.8%	3.1%	3.9%	96.1%	100.0%
423210	1.1%	0.0%	0.4%	0.4%	1.9%	6.2%	8.2%	91.8%	100.0%
423320	0.0%	0.4%	0.0%	0.0%	0.4%	4.1%	4.6%	95.4%	100.0%
423390	2.9%	0.0%	0.8%	0.0%	3.8%	11.8%	15.5%	84.5%	100.0%
423440	0.2%	0.1%	0.1%	0.0%	0.4%	2.6%	3.0%	97.0%	100.0%
423450	3.8%	1.0%	1.3%	0.3%	6.4%	7.4%	13.8%	86.2%	100.0%
423510	0.8%	0.3%	0.0%	0.3%	1.3%	5.3%	6.5%	93.5%	100.0%
423610	0.9%	0.4%	0.3%	0.2%	1.8%	5.3%	7.1%	92.9%	100.0%
423690	1.2%	0.6%	1.0%	0.2%	3.0%	6.5%	9.5%	90.5%	100.0%
423730	0.7%	0.4%	0.0%	0.0%	1.1%	3.6%	4.6%	95.4%	100.0%
423850	1.1%	0.1%	0.1%	0.2%	1.6%	12.1%	13.7%	86.3%	100.0%
423910	0.9%	0.2%	0.0%	0.0%	1.1%	3.2%	4.3%	95.7%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE	Total
423990	0.6%	0.2%	0.1%	0.0%	0.9%	4.0%	4.9%	95.1%	100.0%
424130	0.5%	0.0%	0.5%	0.5%	1.6%	3.1%	4.7%	95.3%	100.0%
424210	3.7%	0.4%	0.4%	0.0%	4.5%	7.4%	11.9%	88.1%	100.0%
424320	1.4%	1.4%	0.0%	0.0%	2.9%	7.2%	10.1%	89.9%	100.0%
424330	2.4%	0.5%	0.0%	0.5%	3.3%	13.7%	17.1%	82.9%	100.0%
424590	0.0%	0.0%	0.4%	0.4%	0.9%	4.7%	5.5%	94.5%	100.0%
424690	1.6%	0.4%	0.9%	0.2%	3.1%	4.0%	7.2%	92.8%	100.0%
424710	1.2%	0.0%	0.0%	0.0%	1.2%	4.7%	5.8%	94.2%	100.0%
424720	1.2%	0.0%	0.0%	0.0%	1.2%	5.4%	6.7%	93.3%	100.0%
424910	0.2%	0.0%	0.0%	0.2%	0.4%	4.7%	5.1%	94.9%	100.0%
424990	0.3%	0.1%	0.1%	0.0%	0.5%	2.8%	3.2%	96.8%	100.0%
441110	0.8%	0.0%	0.0%	0.1%	0.8%	1.3%	2.2%	97.8%	100.0%
441228	0.1%	0.0%	0.0%	0.0%	0.1%	1.3%	1.4%	98.6%	100.0%
441310	0.0%	0.1%	0.0%	0.0%	0.1%	2.5%	2.7%	97.3%	100.0%
444130	0.0%	0.1%	0.1%	0.1%	0.4%	5.0%	5.4%	94.6%	100.0%
446110	0.3%	0.0%	0.1%	0.1%	0.6%	2.8%	3.4%	96.6%	100.0%
512110	2.9%	0.7%	0.3%	0.3%	4.3%	7.7%	12.0%	88.0%	100.0%
532112	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	94.1%	100.0%
532310	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	2.7%	97.3%	100.0%
Total	0.8%	0.2%	0.2%	0.1%	1.2%	3.9%	5.1%	94.9%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-22: Goods - Distribution of the City Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
315210	Cut and Sew Apparel Contractors	0.2%
323111	Commercial Printing (except Screen and Books)	0.5%
335910	Battery Manufacturing	0.2%
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	0.3%
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	7.0%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	9.6%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)		
423210	Furniture Merchant Wholesalers	0.05%		
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	1.0%		
423390	Other Construction Material Merchant Wholesalers	0.1%		
423440	Other Commercial Equipment Merchant Wholesalers	0.03%		
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.2%		
423510	Metal Service Centers and Other Metal Merchant Wholesalers	1.6%		
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.8%		
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.3%		
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	0.1%		
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.6%		
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	0.2%		
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	0.5%		
424130	Industrial and Personal Service Paper Merchant Wholesalers	0.4%		
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.1%		
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	0.1%		
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	0.2%		
424590	Other Farm Product Raw Material Merchant Wholesalers	0.2%		
424690	Other Chemical and Allied Products Merchant Wholesalers	0.2%		
424710	Petroleum Bulk Stations and Terminals	3.7%		
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	0.1%		
424910	Farm Supplies Merchant Wholesalers	0.2%		
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0.1%		
441110	New Car Dealers	14.7%		
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	2.5%		

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
441310	Automotive Parts and Accessories Stores	0.5%
444130	Hardware Stores	0.1%
446110	Pharmacies and Drug Stores	53.3%
512110	Motion Picture and Video Production	0.1%
532112	Passenger Car Leasing	0.1%
532310	General Rental Centers	0.02%
TOTAL		100.0%

Table E-23: Goods - Aggregated Weighted Availability for the City Contracts

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non- M/WBE	Total
3.1%	0.1%	0.1%	0.6%	3.9%	5.3%	9.2%	90.8%	100.0%

Source: CHA analysis of City of Charlotte data; Hoovers; CHA Master Directory

Table E-24: Goods - Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non- M/WBE
Disparity Ratio	96.1%	53.2% [‡]	15.4% [‡]	51.3% [‡]	86.5%	47.1% [‡]	63.7% [‡]	103.7%

Source: CHA analysis of City of Charlotte data

‡ Indicates substantive significance

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