

**CITY OF CHARLOTTE
DISPARITY STUDY**

Final Report

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1.0 INTRODUCTION

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In November 2002, MGT of America, Inc. (MGT) began work on a disparity study for the City of Charlotte. The results of this study are found in this report. Throughout the chapters that follow, MGT presents its findings, analyses, and recommendations. First, however, this chapter provides a background for the study, the scope of services we were asked to perform, the major tasks undertaken, and an overview of the organization of the report.

1.1 Background

The City of Charlotte (City) commissioned MGT to conduct a disparity study. This study covered five calendar years, beginning January 1, 1998, through December 31, 2002, and is a second-generation study. A first-generation study, completed in 1993 by another consultant, was in response to the 1989 U.S. Supreme Court decision in the case of the *City of Richmond v. J.A. Croson Co.*¹ requiring local agencies to adhere to the legal standard of strict scrutiny as a condition of implementing remedial race-conscious contracting programs. The 1993 Charlotte Disparity Study provided the factual predicate for the City's' Minority and Women Business Enterprise (M/WBE)² Programs.

With subsequent court cases following *Croson*, many government agencies began to update their initial study. MGT was then selected by the City to conduct the disparity study.

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

² M/WBE and MBE are used interchangeably to refer to minority-owned or woman-owned business enterprises.

1.2 Scope of Services

The scope of services required by the City in conducting the disparity study included:

- conducting a detailed legal review of *Croson* and other relevant court cases with emphasis on program and methodological requirements;
- reviewing City's procurement policies, procedures, and programs;
- analyzing the effectiveness of race- and gender-based and race- and gender-neutral programs;
- conducting utilization analyses of minority, women, and nonminority firms in the City's procurement of goods and services;
- determining the availability of qualified minority and women-owned firms;
- analyzing the utilization and availability data for determination of disparity;
- analyzing the results of an on line survey, personal interviews, focus groups, and public hearing;
- conducting a multivariate (regression) analysis; and
- identifying narrowly tailored race- and gender-based and race- and gender-neutral remedies.

1.3 Major Tasks

In conducting the study and preparing our recommendations, MGT followed a carefully designed work plan that allowed study team members to fully analyze availability, utilization, and disparity with regard to minority, women, and nonminority firms. The final work plan consisted of 16 major tasks:

- Conduct Detailed Legal Review
- Finalize Work Plan
- Review Policies, Procedures, and Programs
- Collect Data
- Conduct Market Area Analyses
- Conduct Utilization Analyses

- Determine the Availability of Qualified Firms
- Analyze the Utilization and Availability Data
- Conduct an On-line Survey of Vendors
- Conduct the Regression Analysis
- Conduct Disparity Analyses
- Collect and Analyze Anecdotal Information
- Review Race- and Gender-Neutral Remedies
- Conduct Employment Analyses
- Identify Narrowly Tailored Remedies
- Prepare a Final Report.

The study team used a variety of procedures to collect data. The procedures included:

- review and analysis of City records and databases;
- review and analysis of documents and reports;
- interviews with members from a broad spectrum of the business community; and
- interviews with City staff.

1.4 Organization of the Report

The following chapters of this report are designed to give the reader a comprehensive overview of the City's procurement practices; past and present patterns of minority, women, and nonminority availability and utilization; and a broad understanding of the environment in which the City operates. This report contains the following chapters:

- Chapter 2.0—an in-depth legal analysis of relevant court cases.
- Chapter 3.0—a review of procurement policies and procedures, and programs.
- Chapter 4.0—the methodology employed in conducting and analyzing the utilization and availability of minority, women, and nonminority businesses in procurement.
- Chapter 5.0—an analysis of the levels of disparity for minority, women, and nonminority prime contractors and subcontractors, a multivariate analysis, and a private sector utilization and availability analysis.

- Chapter 6.0—an analysis of anecdotal data collected from an on-line survey, personal interviews, focus group, and public hearing.
- Chapter 7.0—an analysis of private sector utilization and disparity.
- Chapter 8.0—summary of the overall report, conclusions, and recommendations.³

The appendices, provided under separate cover, include:

Appendix A: Interview Guide for Staff

Appendix B: Account Codes, Business Category, and Decomposed Category

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Appendix U: Private Sector Utilization – Reed Construction Data

³ Chapter 8.0 is designed to provide a summary of the overall report, conclusions drawn from the study, and MGT's recommendations. Chapter 8.0 serves as an Executive Summary for the study.

2.0 LEGAL REVIEW

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2.1 Introduction

This chapter provides legal background for the report. The material that follows in this chapter does not constitute legal advice to the City of Charlotte on minority business programs, affirmative action, or any other matter. Instead, the chapter provides a context for the statistical and anecdotal analysis that follows in the subsequent chapters of this report.

As is the case today with many laws involving federal and state action, affirmative action law is an evolving area of jurisprudence. Since the United States Supreme Court's decision in the *Croson*¹ case, governmental entities have struggled to establish and maintain affirmative action programs to eliminate discriminatory practices while complying with the guidelines issued by the Supreme Court. The *Croson* decision and lower court cases that followed have set forth the legal standards that should be the basis for a well-designed program. This review identifies and analyzes those standards, and summarizes how courts evaluate the constitutionality of race- and gender-specific programs. Particular emphasis will be placed on decisions in the Fourth Circuit, the recent decisions upholding the federal Department of Transportation (DOT) disadvantaged business enterprise (DBE) programs, and legal issues involving Small Business Enterprise (SBE) programs. The fundamental requirements necessary for the maintenance of a permissible affirmative action program involving the procurement of goods or services by governmental entities are summarized as follows:

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

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

- Strict scrutiny has two basic components: compelling governmental interest and narrow tailoring.
- To survive the strict scrutiny standard, remedial race-conscious programs must be based on a compelling governmental interest.
- Compelling interest means that the government has to demonstrate that there is a problem that requires remedial attention.
- There must be a “strong basis in the evidence” for the compelling governmental interest.
- The evidentiary foundation must be reviewed as part of the implementing jurisdiction’s decision-making process for it to be relevant in any subsequent legal challenge.
- Statistical evidence is preferred; anecdotal evidence is permissible.
- The subsequent program(s) arising from the compelling governmental interest(s) must be narrowly tailored to remedy the identified discrimination.
- Narrow tailoring means that the remedy needs to fit the problem.
- A lesser standard, intermediate judicial scrutiny, is applicable when analyzing programs that establish gender preferences.
- To survive the intermediate scrutiny standard, the remedial gender conscious program must serve important governmental objectives and be substantially related to the achievement of those objectives.

2.2 City of Richmond v. J.A. Croson Company

In 1983, the Richmond City Council adopted a Minority Business Utilization Plan (the Plan) following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the Council also relied on a study that indicated that “while the general population of Richmond was 50 percent African American, only 0.67 percent of the city’s prime construction contracts had been awarded to minority businesses in the five-year period from 1978 to 1983.”² The evidence before the Council established that a variety of state and local contractor associations had little or no minority business

² Id. at 479-80.

membership. The Council also relied on statements by a Council member whose opinion was that “the general conduct of the construction industry in this area, the state, and around the nation, is one in which race discrimination and exclusion on the basis of race is widespread.”³ There was, however, no direct evidence of race discrimination on the part of the city in its contracting activities or evidence that the city’s prime contractors had discriminated against minority-owned subcontractors.⁴

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

J.A. Croson Company, a non-MBE mechanical plumbing and heating contractor, filed a lawsuit against the City of Richmond alleging that the Plan was unconstitutional and violative of the Equal Protection Clause of the Fourteenth Amendment. After the district court and circuit court upheld the Plan, the Supreme Court vacated the decisions of the lower courts and remanded the case for further consideration in light of its decision in *Wygant v. Jackson Board of Education*.⁵

On remand, a divided United States Court of Appeals for the Fourth Circuit refused to uphold the Richmond Plan. The court held that “findings of societal discrimination will not suffice [to support a race-based plan]; the findings must concern prior discrimination by the governmental unit involved.”⁶ The court further held that the Plan was not narrowly tailored to accomplish a remedial purpose. The 30 percent set-aside requirement of the Plan was

³ Id. at 480.

⁴ Id.

⁵ *City of Richmond v. J.A. Croson Co.*, 478 U.S. 1016 (1986); *Wygant v. Jackson Board of Education*, 476 U.S. 267 (1986).

⁶ *City of Richmond v. J.A. Croson Co.*, 822 F.2d 1355, 1358 (4th Cir. 1987).

held to be chosen arbitrarily and not sufficiently related to the number of minority subcontractors in Richmond or any other relevant number.⁷ As a result, the Fourth Circuit struck down the Richmond Plan⁸ and the Supreme Court affirmed this decision.⁹

2.3 Standards of Review for Race-Specific and Gender-Specific Programs

2.3.1 Race-Specific Programs

In *Croson*, the Supreme Court determined that strict scrutiny is the appropriate standard of judicial review for race-conscious affirmative action programs. The Court concluded that a race-conscious program must be based on a compelling governmental interest; and the program must be narrowly tailored to achieve its objective. Ordinarily, courts will find a governmental classification constitutional if it has a “rational basis” to a legitimate governmental interest or purpose.¹⁰ Further, a race-neutral law does not violate the Equal Protection Clause solely because it has (for example) a racially disproportionate impact.¹¹ Because the affirmative action plan adopted by the City of Richmond denied certain citizens the opportunity to compete for a fixed percentage of public contracts based solely on their race, the Court determined that a strict scrutiny standard of review must be applied.¹² This standard requires a firm evidentiary basis for concluding that the underrepresentation of minorities is a product of past discrimination.¹³

2.3.2 Gender-Specific Programs

The Supreme Court has never directly addressed the issue of a gender-based classification in the context of woman-owned business enterprise (WBE) programs. *Croson*

⁷ *Id.* at 1360.

⁸ *Id.* at 1362.

⁹ *Croson*, 488 U.S. at 511.

¹⁰ *United States v. Carolene Products Co.*, 304 U.S. 144, 152-53 n.4 (1938).

¹¹ *Washington v. Davis*, 426 U.S. 229, 239 (1976).

¹² *City of Richmond v. J.A. Croson Co.*, 478 U.S. 1016 (1986); *Wygant v. Jackson Board of Education*, 476 U.S. 267 (1986).

¹³ *Croson*, 488 U.S. at 472.

was limited to the review of an MBE plan. In general, in evaluating gender-based classifications that operate to the advantage of women, the Court has used "intermediate scrutiny," which is a lower standard of review less stringent than the strict scrutiny test employed to analyze race-based classifications. This analysis requires the governmental organization to demonstrate an important governmental objective and develop a program that bears a direct and substantial relation to achieving that objective.¹⁴ Some federal courts have required that classification based on gender satisfy an "exceedingly persuasive justification" test.¹⁵

Several courts have employed the intermediate scrutiny standard in reviewing WBE programs, but struck down the programs nevertheless.¹⁶ The one exception was in *Coral Construction v. King County*, where the court upheld a WBE program under the intermediate scrutiny standard.¹⁷ But even under intermediate scrutiny, the court in *Coral Construction* noted that some degree of discrimination must be demonstrated in a particular industry before a gender-specific remedy may be instituted in that industry: "The mere recitation of a benign, compensatory purpose will not automatically shield a gender-specific program from constitutional scrutiny."¹⁸

¹⁴ *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982); *Craig v. Boren*, 429 U.S. 190, 211 (1976) (Powell, J, concurring).

¹⁵ *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982), as well as *Associated General Contractors of California v. City and County of San Francisco*, 813 F. 2d. (9th Cir. 1987) and *Michigan Road Builders Ass'n., Inc. v. Milliken*, 834 F. 2d. 583 (6th Cir. 1987).

¹⁶ See, e.g., *AUC v. Baltimore*, 83 F.Supp2d 613 (D Md 2000); *Scott v. City of Jackson*, 199 F.3d 206, 215, n. 9 (1999); *Arrow Supply v. Detroit*, 826 F. Supp. 1072 (ED Mich 1993). *Engineering Contractors v. Dade County*, 122 F.3d 895 (11th Cir 1997). See, e.g., *Builders Association of Greater Chicago v. County of Cook*, 2001 U.S. App. LEXIS 15066 (7th Cir 2001).

¹⁷ *Coral Construction v. King County*, 961 F.2d 910 (9th Cir 1991) , cert. denied, 112 S. Ct. 875 (1992).

¹⁸ *Id.* at 932.

2.4 To Withstand Strict Scrutiny an MBE Program Must be Based on a Compelling Governmental Interest such as Remedying Discrimination

Under strict scrutiny, a race-conscious affirmative action program must be based on a “compelling governmental interest” and must be “narrowly tailored” to achieve that interest.

In general, it is settled law that:

*In practice, the interest that is alleged in support of racial preferences is almost always the same—remedying past or present discrimination. That interest is widely accepted as compelling. . . . [T]he true test of an affirmative action program is usually not the nature of the government’s interest, but rather the adequacy of the evidence of discrimination offered to show that interest.*¹⁹

The courts have identified two factors necessary to establish a compelling governmental interest. First, there needs to be identified discrimination in the local relevant market. As the Court of Appeals in the D.C. Circuit noted in *O’Donnell*, “The District [Washington, D.C.] cannot simply rely on broad expressions of purpose or general allegations of historical or societal racism. Rather, its legislation must rest on evidence at least approaching a *prima facie* case of racial discrimination in the relevant industry.”²⁰ The second factor necessary to show a compelling governmental interest is “the governmental actor enacting the set-aside program must have somehow perpetuated the discrimination to be remedied by the program.”²¹

2.4.1 Federally Funded Projects

Federal DBE programs are now governed by the constitutional standards set in the 1995 Supreme Court case of *Adarand Constructors, Inc. v. Peña*.²² The *Adarand* ruling

¹⁹ *Engineering Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 906 (11th Cir. 1997) (*Engineering Contractors II*) (citing *Ensley Branch NAACP v. Seibels*, 31 F.3d 1548, 1564 (11th Cir. 1994) (citations and internal quotation marks omitted)). *Maryland Troopers Ass’n, Inc. v. Evans*, 993 F.2d 1072, 1076 (4th Cir. 1993).

²⁰ *O’Donnell v. District of Columbia*, 963 F.2d 420 (DC Cir 1992).

²¹ *Coral Construction* at 500-501.

²² *Adarand v. Peña*, 790 F.Supp. 240, 16 F.3d 1537 (10th Cir. 1996), cert. granted, 63 U.S.L.W. 3213 (U.S. Oct. 4, 1996) (No. 63-12), 115 S.Ct. 2097 (1995).

overturned the constitutional test in *Fullilove v. Klutznick*²³ for federal DBE programs. The Supreme Court in *Adarand* decided that federal DBE programs should be examined by the same strict scrutiny standard used for state and local programs.²⁴ In January 1999, the United States Department of Transportation (USDOT) published its final DBE rule in Title 49, Code of Federal Regulations, Part 26 (49 CFR 26) that addressed the Clinton Administration's affirmative action review and the *Adarand* decisions.

In the latest round of the *Adarand* litigation, the Court of Appeals in the Tenth Circuit upheld the revised USDOT DBE program as modified by the new regulations in 49 CFR 26. The Tenth Circuit found in *Adarand v. Slater*,²⁵ as has every other court considering the matter, that Congress did have a compelling interest for the DBE program. The ruling noted two barriers that demonstrated a link between "public funds for construction contracts and the channeling of those funds due to private discrimination": (1) discriminatory barriers to the formation of DBE subcontractors, and (2) barriers to fair competition between minority and nonminority subcontractors.²⁶ The first barrier was supported by evidence of behavior by prime contractors, unions, lenders, and bonding companies. Evidence for the second barrier showed that "informal, racially exclusionary business networks dominate the subcontracting construction industry" exemplified by family-run firms with long-standing relationships with majority subcontractors. The court also noted evidence that when DBE programs are discontinued, DBE contracting participation falls sharply. The Court stated that while this evidence "standing alone is not dispositive, it strongly supports the

²³ *Fullilove v. Klutznick*, 100 S.Ct. 2758 (1980).

²⁴ Upon remand the District Court ruled in favor of *Adarand*. The District Court found that while there was a compelling government interest for the program, the program was not narrowly tailored. In March of 1999 the Tenth Circuit vacated the District Court ruling as moot because *Adarand* had become certified as a DBE. In January of 2000 the U.S. Supreme Court vacated the Appeals Court decision on mootness and remanded the case for a ruling on the merits of *Adarand v. Slater*, 120 S.Ct. 722 (2000).

²⁵ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir 2000),

²⁶ *Adarand v. Slater*, at 13.

government's claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination."²⁷

Several related points were made recently in *Gross Seed v. Nebraska Department of Roads*²⁸ that are similar to *Adarand v. Slater*. On compelling interest, the court said it is not going to second guess Congressional findings in this area. In addition, the court upheld the view that Congress has considerably more power to correct racial discrimination than do state and local government (a point also made by Justice O'Connor in *Croson*). Moreover, the court stated that the Constitution imposes different requirements when a state implements a federal M/WBE program, as opposed to when a state or locality initiates an M/WBE program. One consequence of this view is that as a recipient of federal DOT funds a state DOT need not independently prove that its DBE program satisfies the strict scrutiny standard.²⁹

2.4.2 A Strong Evidentiary Basis Must Exist That Specifically Identifies and Demonstrates the Discrimination to be Remedied by the M/WBE Program

Although the Supreme Court in *Croson* did not specifically define the methodology that should be used to establish the evidentiary basis required by strict scrutiny, the Court did outline governing principles. Lower courts have expanded the Supreme Court's *Croson* guidelines and have applied or distinguished these principles when asked to decide the constitutionality of state, county, and city programs that seek to enhance opportunities for minorities and women. It is important to point out, however, that a number of courts have stated—including most recently the Court of Appeals in the 10th Circuit—that the

²⁷ *Adarand v. Slater*, at 18.

²⁸ *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002). See also *Sherbrooke Turf v. Minnesota*, 2001 U.S. Dist. LEXIS 19565 (D Minn 2001).

²⁹ *Gross Seed v. Nebraska Department of Roads*, at 15. See also *Milwaukee County Pavers v. Feidler*, 922 F.2d 429, 423 (7th Cir 1991).

“Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination.”³⁰

2.4.2.1 Postenactment Evidence

The Supreme Court in *Croson* found preenactment evidence of discrimination insufficient to justify the program. The defendant in *Croson* did not seek to defend its program based on postenactment evidence. However, following *Croson* a number of circuits did defend the use of postenactment evidence to support the establishment of a local public affirmative action program.³¹ Some cases required preenactment and postenactment evidence.³²

The Supreme Court case in *Shaw v. Hunt*³³ raised anew the issue of post enactment evidence in defending local public sector affirmative actions programs. *Shaw* involved the use of racial factors in drawing voting districts in North Carolina. In *Shaw* the Supreme Court rejected the use of reports providing evidence of discrimination in North Carolina because the reports were not developed before the voting districts were designed. Thus what was critical was whether the legislative body believed that discrimination existed before the districts were drafted.³⁴

Following the *Shaw* decision, two districts courts rejected the use of postenactment evidence in the evaluation of the constitutionality of local minority business programs.³⁵ In *West Tennessee ABC v. Memphis City Schools* the court stated that "The holdings of *Wygant*, *Croson*, and *Shaw* collectively suggest that the court's task is not to determine if

³⁰ *Concrete Works v. Denver IV*, 2003 US App Lexis 2396 (10th Cir 2003), quoting *Concrete Works v. Denver II*, 6 F.3d at 1522.

³¹ See, e.g., *Engineering Contractors v. Dade County*, 122 F.3d 895 (11th Cir 1997); *Contractors Assn v. Philadelphia*, 6 F.3d 990 (2d Cir 1993); *Concrete Works v. The City and County of Denver*, 36 F.3d 1513 (10th Cir 1994)

³² See, e.g., *Coral Construction v. King County*, 941 F.2d 910 (1991).

³³ *Shaw v. Hunt*, 517 U.S. 899 (1996).

³⁴ *Shaw v. Hunt*, 517 U.S. 899, 910 (1996).

³⁵ *AUC v. Baltimore*, 83 F.Supp.2d 613 (D Md 2000); *West Tenn ABC v. Memphis City Schools*, 64 F.Supp.2d 714 (WD Tenn 1999).

there is now a compelling interest to justify race-based remedial action; its task is to determine if the defendants, at the time they adopted race-based plans, had a compelling interest to act on the basis.³⁶ In *Associated Utility Contractors v. Baltimore*, a decision in the Fourth Circuit, the City of Baltimore had enacted a minority business ordinance in 1986. Following *Croson*, the City held public hearings and adopted a new ordinance that readopted the original goals of the earlier ordinance. Although an annual review of the program was required by the ordinance, the same goals were readopted without dispute in every subsequent year. The City of Baltimore had never conducted a disparity study nor maintained data upon which a disparity study could be conducted. There were decisions in the Fourth Circuit permitting consideration of postenactment evidence in the judicial review of affirmative action programs,³⁷ but the court in *Associate Utility Contractors* deemed those decisions as being before the clarification provided by the Supreme Court in *Shaw*.

2.5 Evidence of Significant Statistical Disparities Between Minorities Utilized and Qualified Minorities Available May Satisfy Strict Scrutiny and Justify a Narrowly Tailored M/WBE Program

Regarding statistical evidence to support a race-conscious program, the Supreme Court in *Croson* stated that “where gross statistical disparities can be shown, they alone in a proper case may constitute *prima facie* proof of a pattern or practice of discrimination.”³⁸ But the statistics may not compare the general population to prime construction contracts awarded to MBEs. The Court objected to this comparison since the proper statistical evaluation would compare the percentage of MBEs in the relevant market that are qualified

³⁶ *West Tennessee ABC v. Memphis City Schools*, 64 F. Supp.2d 714, 718 (WD Tenn 1999).

³⁷ See, e.g., *Poderbesky v. Kirwan*, 38 F.3d 147 (4th Cir 1994); *Maryland Troopers Assn v. Evans*, 993 F.2d 1072 (4th Cir 1993).

³⁸ *Croson*, 488 U.S. at 501, quoting *Hazelwood School Division v. United States*, 433 U.S. 299, 307-308 (1977).

to undertake City subcontracting work with the percentage of total City construction dollars that are presently awarded to minority subcontractors.³⁹

To measure utilization, courts have accepted the standard disparity index.⁴⁰ The Supreme Court in *Croson* recognized the use of statistical comparison to measure disparity by comparing the number of available M/WBEs qualified to perform certain contracts with the amount of City construction dollars that were actually being awarded to M/WBEs in order to demonstrate discrimination in the local construction industry.⁴¹

The Ninth Circuit concluded, “In our recent decision [*Coral Construction*] we emphasized that such statistical disparities are ‘an invaluable tool’ in demonstrating the discrimination necessary to establish a compelling interest.”⁴² Several other U.S. courts of appeal have recognized the use of disparity indices or similar measures to examine the utilization of minorities or women in a particular industry.⁴³

2.5.1 Data Sources to Examine Underutilization

To demonstrate an evidentiary basis for enacting a race- or gender-conscious program and to satisfy *Croson*’s compelling interest prong, governmental entities must present evidence of underutilization of M/WBEs that would give rise to an inference of discrimination in public contracting.⁴⁴

A number of studies have been criticized because of infirmities in the underlying data. Also, it is not clear how many years must be reviewed. There is some judicial opinion that

³⁹ *Croson*, 488 U.S. at 501.

⁴⁰ See e.g., *Cone Corp. v. Hillsborough County*, 908 F.2d 909, 916 (11th Cir 1990); *O’Donnell Construction v. District of Columbia*, 963 F.2d 420, 426 (DC 1992)

⁴¹ *Croson*, 488 U.S. at 503-504.

⁴² *Associated General Contractors of California, Inc.*, 950 F.2d at 1414 (citing *Coral Construction Co.*, 941 F.2d at 918; see also, *Croson*, 488 U.S. at 509).

⁴³ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1523 n.10 (10th Cir. 1994) (recognizing disparity index to demonstrate underutilization); *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990, 1005 (3rd Cir. 1993) (relying on disparity indices); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 915-16 (11th Cir. 1990) (employing similar statistical analyses).

⁴⁴ *Croson*, 488 U.S. at 509.

two years is inadequate.⁴⁵ In *Arrow Supply v. City of Detroit*⁴⁶ the program was struck down in part because of incomplete collection of utilization data. In *Arrow* the district court criticized the study prepared by the defendant's expert for a "small sample taken (on an unknown basis) of a vast group of undisclosed size."⁴⁷

In *Engineering Contractors* the district court criticized the factual predicate for relying on release of lien data to measure subcontractor utilization. The district court argued that the release of lien data included prime contractors acting as subcontractors on their own projects and that the sales data for firms filing a contractor's release of lien included sales from anywhere in the United States.⁴⁸

2.5.2 Determining Availability

One of the most important elements of the disparity index is the determination of "availability"—the number of qualified minority contractors willing and able to perform a particular service for the municipality. In *Croson*, the Court stated:

*Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise.*⁴⁹

An accurate determination of availability is necessary so that the legislative body may "determine the precise scope of the injury it seeks to remedy" by its program.⁵⁰ Following *Croson's* statements on availability, lower courts have decided how legislative bodies may determine the precise scope of the injury sought to be remedied by an MBE program. Availability statistics must be collected accurately and evaluated carefully. If the availability

⁴⁵ *Phillips & Jordan v. Watts*, 13 F.Supp. 1308, 1315 (ND Fla 1998). See also *AGC v. Columbus*, 936 F. Supp. 1363 (SD Ohio 1996).

⁴⁶ *Arrow Supply v. Detroit*, 826 F. Supp. 1072 (ED Mich 1993).

⁴⁷ *Arrow Supply*, at 1080.

⁴⁸ *Engineering Contractors v. Dade County*, at 1567, n158

⁴⁹ *Id.*, 488 U.S. at 509 (emphasis added).

⁵⁰ *Id.*, 488 U.S. at 498.

determination is too narrow, potential discrimination will be understated or dismissed. If the availability determination is too broad, discrimination will be exaggerated. However, as will be seen below, the federal courts have not laid out one data source or technique for measuring M/WBE availability.

2.5.3 Racial Classifications

In determining availability, a threshold issue is the appropriate racial groups to consider.⁵¹ In *Croson*, the Supreme Court criticized the City of Richmond's inclusion of "Spanish-speaking, Oriental, Indian, Eskimo, or Aleut persons" in the City's affirmative action program.⁵² These groups had not previously participated in city contracting, and "the random inclusion of racial groups that, as a practical matter, may never have suffered from discrimination in the construction industry in Richmond suggests that perhaps the city's purpose was not in fact to remedy past discrimination."⁵³ To properly evaluate availability, data must be gathered for each racial group.

Several subsequent cases have dropped specific groups for lack of evidence. For example, in *Association for Fairness in Business v. New Jersey* the court stated, "In addition, the set-aside program is over-inclusive as between minority business enterprises. New Jersey has offered no evidence of discrimination against companies run by individuals of Native American, Native Alaskan, Hawaiian, or Portuguese decent."⁵⁴

2.5.4 Relevant Market Area

Another central issue in availability analysis is the definition of the relevant market area. Specifically, the question is whether the relevant market area should be defined as the area from which a specific percentage of purchases is made, the area in which a

⁵¹ Racial groups, as the term is used herein, includes both racial and ethnic categories.

⁵² *Id.*, 488 U.S. at 506.

⁵³ *Id.*

⁵⁴ *Assn for Fairness in Business v. New Jersey*, 82 F.Supp. 2d 353, 362 (D NJ 2000). See also *Northeastern Florida AGC v. Jacksonville*, 2123 S.Ct. 2297 (1993).

specific percentage of willing and able contractors is located, or if the area is a fixed geopolitical boundary. If the relevant market area is not properly defined, it can artificially inflate or deflate M/WBE availability. The Supreme Court has not yet established how the relevant market area should be defined. However, some courts of appeal have done so, including the Tenth Circuit in *Concrete Works*.⁵⁵ *Concrete Works of Colorado*, a non-M/WBE construction company, argued that *Croson* precluded consideration of discrimination evidence from the six-county Denver Metropolitan Statistical Area (MSA), and, therefore, Denver should be confined to the use of data within the City and County of Denver alone. The Tenth Circuit, interpreting *Croson*, concluded, “The relevant area in which to measure discrimination . . . is the local construction market, but that is not necessarily confined by jurisdictional boundaries.”⁵⁶ The court further stated:

*It is important that the pertinent data closely relate to the jurisdictional area of the municipality whose program we scrutinize, but here Denver’s contracting activity, insofar as construction work is concerned, is closely related to the Denver MSA.*⁵⁷

The Tenth Circuit ruled that over 80 percent of Denver Department of Public Works construction and design contracts were awarded to firms located within the Denver MSA; therefore, the appropriate market area should be the Denver MSA—not the City and County of Denver alone.⁵⁸ Accordingly, data from the Denver MSA was “adequately particularized for strict scrutiny purposes.”⁵⁹ In *Concrete Works*, the Court accepted data concerning only construction and construction-related services in determining the relevant market area.

⁵⁵ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994).

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

2.5.5 Firm Qualifications

Another availability consideration is whether the M/WBE firms considered are qualified to perform the required services. In *Croson*, the Supreme Court noted that although gross statistical disparities may demonstrate *prima facie* proof of discrimination, “when special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value.”⁶⁰ The Court, however, did not define the appropriate mechanism for determining whether a firm is qualified.

Nevertheless, considering firm qualifications is important not only to assess whether M/WBEs in the relevant market area are capable of providing the goods and services required, but it also ensures proper comparison between the number of qualified M/WBEs and the total number of similarly qualified contractors in the relevant market area.⁶¹ In short, proper comparisons are necessary to ensure the integrity of the statistical analysis.

One element of qualifications is that courts have generally ruled that it is necessary to examine prime contractors and subcontractors separately.⁶² The district court decision in *Contractors Assn of Eastern Pennsylvania, Inc. v. City of Philadelphia*⁶³ required that prime contractors be counted from the list of prequalified firms. It should be noted that during the appellate review, the Third Circuit did state that “the issue of qualifications can be approached at different levels of specificity, however, and some consideration of the practicality of various approaches is required.”⁶⁴

⁶⁰ *Croson*, 488 U.S. 469, 501, citing *Hazelwood*, 433 U.S. at 308, n.13.

⁶¹ *Hazelwood School Dist.*, 433 U.S. 299.

⁶² *Scott v. City of Jackson*, 199 F.3d at 218 (1999).

⁶³ 893 F.Supp. 419 (ED Pa 1995).

⁶⁴ *Contractors Assn of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3rd Cir 1996).

2.5.6 Willing

Croson requires that in order to be considered available a firm must not only be qualified to provide the required services but also be willing to provide the required services. An inference of discriminatory exclusion arises when there is significant statistical disparity between the number of qualified MBEs and MBEs actually engaged by the locality.⁶⁵ In this context, it can be a difficult task to determine whether a business is willing. Courts reviewing this issue have looked favorably on including businesses in the availability pool that may not be on a governmental entity's certification list. In *Concrete Works*, Denver presented evidence as part of its availability analysis indicating that while most MBEs and WBEs had never participated in city contracts, "almost all firms contacted indicated that they were interested in City work."⁶⁶

In *Contractors Association of Eastern Pennsylvania, Inc.*, the Third Circuit explained, "In the absence of some reason to believe otherwise, one can normally assume that participants in a market with the ability to undertake gainful work will be 'willing' to undertake it."⁶⁷

*Past discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure the work. . . . [I]f there has been discrimination in City contracting, it is to be expected that African American firms may be discouraged from applying, and the low numbers [of African American firms seeking to prequalify for City-funded contracts] may tend to corroborate the existence of discrimination rather than belie it.*⁶⁸

2.5.7 Able

Another availability consideration is whether the firms considered are able to perform a particular service. Those who challenge affirmative action often question whether M/WBE

⁶⁵ *Croson*, 488 U.S. at 509.

⁶⁶ *Concrete Works*, 36 F.3d at 1529.

⁶⁷ *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3rd Cir. 1996).

⁶⁸ *Id.* at 603-04.

firms have the “capacity” to perform particular services, which focuses on the availability determination on firm size. *Concrete Works II and IV* recognized the shortcomings of such a focus.⁶⁹ Additionally, the court observed that when a challenger introduces credible evidence of firm capacity, “it becomes a factor that the court should consider.”⁷⁰ The court also acknowledged the City of Denver’s argument that “a construction firm’s precise ‘capacity’ at a given moment in time belies quantification due to the industry’s highly elastic nature.”⁷¹

In *Engineering Contractors* statistical analysis did show that firm size was a factor in explaining firm utilization. However, the trial court ruled that the remaining disparities after controlling for firm size did not provide a “strong basis in evidence” to justify a procurement preference to Black firms.⁷²

On the one hand, considering a firm’s size may be necessary to determine whether the firm is capable and available to provide the requested services. On the other hand, the 10th Circuit recently noted that the relevance of firm size is somewhat diminished by the practice of hiring employees.⁷³ It is a common practice among construction companies of all sizes to routinely vary the size of their employment ranks depending on the type of project being undertaken.

2.5.8 The Use of Various Data Sources to Measure Availability

One area of controversy on the availability side has been the use of census data. Census data have the benefit of being accessible, comprehensive, and objective in measuring availability. In *Contractors Association of Eastern Pennsylvania*, the Third Circuit—while acknowledging some of the limitations of census data—admitted that census

⁶⁹ *Concrete Works*, 36 F.3d at 1528-29.

⁷⁰ *Id.* at 1528.

⁷¹ *Id.* *Concrete Works IV*, 2003 U.S App. Lexis 2396 (10th Cir 2003).

⁷² *Concrete Works II* at 1566

⁷³ *Concrete Works IV*, 2003 U.S App. Lexis 2396 (10th Cir 2003).

data could be of some value in disparity studies. In that case the City's consultant calculated a disparity using data concerning the total amount of contract dollars awarded by the City, the amount that went to MBEs, and the number of African American construction firms. The consultant combined these data with data from the Census Bureau on the number of construction firms in the Philadelphia Standard Metropolitan Statistical Area.⁷⁴

Some commentators have suggested the use of bidder data to measure M/WBE availability.⁷⁵ It is worth noting, however, that *Croson* did not require the use of bidder data to determine availability, and the Fourth Circuit has not reached that conclusion either. In *Concrete Works II* the Circuit court noted that looking at bidders only has its limits. Firms that bid may not be qualified or able, and firms that do not bid may be qualified and able to undertake agency contracts.⁷⁶

Moreover, not all contracts are let by competitive bids. The use of vendor data, which is determined by identifying MBEs that have actually performed work for the governmental entity or who have expressed an interest in securing contracts by affirmatively registering with a local agency, has the advantage because it excludes firms that are uninterested or unable to provide goods or services to the governmental entity, while recognizing that a broader pool of firms seek public opportunities than simply those seeking contracts that are competitively bid.

2.5.9 Statistical Significance

In *Engineering Contractors II*, the Eleventh Circuit addressed what constitutes a significant level of disparity. Generally, disparity indices of 80 percent or greater—which are

⁷⁴ *Contractors Association of Eastern Pennsylvania, Inc., v. City of Philadelphia*, 91 F.3d at 604.

⁷⁵ G. LaNoe, "Who Counts? Determining the Availability of Minority Businesses for Contracting After *Croson*," 21 *Harvard Journal of Law and Public Policy* 793, 833 (1998).

⁷⁶ *Concrete Works v. Denver IV*, at 89-90.

close to full participation—are not considered significant.⁷⁷ The court referenced the Equal Employment Opportunity Commission’s disparate impact guidelines, which establish the 80 percent test as the threshold for determining a *prima facie* case of discrimination.⁷⁸ According to the Eleventh Circuit, no circuit that has explicitly endorsed using disparity indices has held that an index of 80 percent or greater is probative of discrimination, but they have held that indices below 80 percent indicate “significant disparities.”⁷⁹

In support of the use of standard deviation analyses to test the statistical significance of disparity indices, the Eleventh Circuit observed that “social scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some other factor than chance.”⁸⁰ With standard deviation analyses, the reviewer can determine whether the disparities are substantial or statistically significant, which lends further statistical support to a finding of discrimination.

2.6 Anecdotal Evidence of the Experiences of Non-MBE, Minority, and Woman-Owned Firms May Be Used to Justify an M/WBE Program

Most disparity studies utilize anecdotal evidence along with statistical data. The Supreme Court in *Croson* discussed the relevance of anecdotal evidence and explained: “Evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”⁸¹ Although the Supreme Court in *Croson* did not expressly consider the

⁷⁷ *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914.

⁷⁸ *Id.* at 914 (citing 29 C.F.R. § 1607.4D concerning the disparate impact guidelines and threshold used in employment cases).

⁷⁹ *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914 (referencing *Contractors Ass’n of Ea. Pa.*, 6 F.3d at 1005, crediting disparity index of 4 percent; and *Concrete Works*, 36 F.3d at 1524, crediting disparity indices ranging from 0 percent to 3.8 percent).

⁸⁰ *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914 (citing *Peightal v. Metropolitan Dade County*, 26 F.3d 1545, 1556 n.16 (11th Cir. 1994)(quoting *Waisome v. Port Authority*, 948 F.2d 1370, 1376 (2d Cir. 1991)).

⁸¹ *Croson*, 488 U.S. at 509.

form or level of specificity required for anecdotal evidence, the Ninth Circuit has addressed both issues.

Regarding the appropriate form of anecdotal evidence, the Ninth Circuit in *Coral Construction* noted that the record provided by King County was "considerably more extensive than that compiled by the Richmond City Council in *Croson*."⁸² The King County record contained affidavits of at least 57 minority or female contractors, each of whom complained in varying degrees of specificity about discrimination within the local construction industry. The *Coral Construction* court stated that the M/WBE affidavits "reflected a broad spectrum of the contracting community" and the affidavits "certainly suggested that ongoing discrimination may be occurring in much of the King County business community."⁸³

In *AGCC II*, the Ninth Circuit addressed the specificity of anecdotal evidence required by *Croson*.⁸⁴ The contractors contended that the City's evidence lacked the specificity required by both *Croson* and *AGCC I*. The court held that the City's findings were based on substantially more evidence than the anecdotes in the two prior cases, and "they [were] clearly based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as significant statistical disparities in the award of contracts."⁸⁵ The court also ruled that the City was under no burden to identify specific practices or policies that were discriminatory.⁸⁶

Reiterating the City's perspective, the court stated that the City "must simply demonstrate the existence of past discrimination with specificity; there is no requirement

⁸² *Coral Construction Co.*, 941 F.2d at 917.

⁸³ *Id.* at 917-18.

⁸⁴ *Associated General Contractors of California, Inc.*, 950 F.2d at 1414.

⁸⁵ *Id.* at 1416. This evidence came from ten public hearings and "numerous written submissions from the public."

⁸⁶ *Id.* at 1410.

that the legislative findings specifically detail each and every instance that the legislative body had relied upon in support of its decision that affirmative action is necessary."⁸⁷

Not only have courts found that a municipality does not have to specifically identify all the discriminatory practices impeding M/WBE utilization, the Circuit Court in *Concrete Works IV* also held that anecdotal evidence collected by a municipality did not have to be verified. The Court stated:

*There is no merit to the [plaintiff's] argument that witnesses' accounts must be verified to provide support for Denver's burden. Anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions...Denver was not required to present corroborating evidence and [the 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.*⁸⁸

Lower courts have relied on anecdotal data to demonstrate the existence of past and present discrimination. Both the Ninth and Tenth Circuits (e.g., in *AGCC II* and *Concrete Works IV*) have indicated that while anecdotal evidence alone is generally not sufficient to prove discrimination, the combination of specific incidents of discrimination in conjunction with significant statistical disparities satisfies the "strong-basis-in-evidence" test for establishing discrimination to justify a narrowly tailored race- and gender-conscious program.

In *Coral Construction*, the Ninth Circuit addressed the use of anecdotal evidence alone to prove discrimination. Although King County's anecdotal evidence was extensive, the court noted the absence in the record of any statistical data in support of the program. Additionally, "While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a *systemic pattern of discrimination*

⁸⁷ Id. at 1416.

⁸⁸ *Concrete Works IV*, at 108.

necessary for the adoption of an affirmative action plan."⁸⁹ The court concluded that "the combination of convincing anecdotal and statistical evidence is potent."⁹⁰

2.7 The Governmental Entity or Agency Enacting an MBE Program Must Be Shown to Have Actively or Passively Perpetuated the Discrimination

The Supreme Court stated in *Croson*: "It is beyond dispute that any public entity, state or federal, has a *compelling* interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of *private* prejudice."⁹¹

Croson provided that the government "can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment."⁹² The government agency's active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Finding discrimination in the portions of the private sector economy that are subjects of the disparity study can also show passive participation. In *Croson* the Court stated, "A municipality has a compelling government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality's legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program."⁹³

The recent Court of Appeals decision in *Adarand* concluded that there was a compelling interest for a DBE program based primarily on evidence of private sector

⁸⁹ *Coral Construction Co.*, 941 F.2d at 919 (emphasis added).

⁹⁰ *Id.*

⁹¹ *Coral Construction Co.*, 941 F.2d at 922 (citing *Croson*, 488 U.S. at 492) (emphasis added).

⁹² See *Richmond v. Croson*, 488 U.S. 492 (1989); see generally I. Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" 98 *Columbia Law Review* 1577 (1998).

⁹³ *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

discrimination.⁹⁴ Subsequent lower court cases have restated that the government agency has a compelling interest in not financing private discrimination with public dollars.⁹⁵

In reliance on this language in *Croson* a number of local agencies have increased their reliance on evidence of discrimination in the private sector.⁹⁶ The City of Atlanta, in the revisions to its program, tried to focus on evidence of discrimination in the private sector.⁹⁷

This strategy has not always succeeded. In the purest case, Cook County did not produce a disparity study but instead presented anecdotal evidence that M/WBEs were not solicited for bids in the private sector. Cook County lost the case.⁹⁸ Similarly, evidence of private sector discrimination presented in litigation was found inadequate in the Philadelphia, Dade County, and Fulton County cases.⁹⁹ However, recently in *Concrete Works IV* the Court of Appeals upheld the relevance of data from the private marketplace to the establishment of a factual predicate for M/WBE programs.¹⁰⁰ The basic issues have been as follows.

First, is it necessary to demonstrate a nexus between private and public discrimination? The Third Circuit, for example, has stated, in discussing low MBE participation in a local contractors association, that “racial discrimination can justify a race-

⁹⁴ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir 2000).

⁹⁵ *Drabik*, 214 F.3d at 734-35. See also *Concrete Works II*, 36 F.3d at 1529. *Coral Construction*, 941 F.2d at 916; *AGC v. New Haven*, 791 F.Supp. at 947.

⁹⁶ This was motivated in part by a law review article by Ian Ayres and F. Vars, “When Does Private Discrimination Justify Public Affirmative Action?” *Columbia Law Review* 98 (1998) 1577.

⁹⁷ The new Atlanta program has the following key provisions: A prime contractor can bid a contract if it can show that in the last two years it awarded at least 34 percent of subcontract on both private and public sector jobs to M/WBE firms; if the prime cannot satisfy the first requirement above, it must show good faith efforts; if the vendor cannot meet the goal at the end of two years, then the vendor can no longer bid on city contracts. The program also contains a mentor-protégée component. There are no set-asides or geographical preferences in the new program. Atlanta Ordinance 00-0-1859 (2001). The program has not been challenged as of this date.

⁹⁸ *Builders Association of Greater Chicago v. County of Cook*, 123 F. Supp. 2d 1087 (ND IL 2000).

⁹⁹ *Webster v. Fulton County*, op.cit., *Contractors Assn. of Eastern Penn v. Philadelphia*, op.cit.; *Engineering Contractors Ass'n of South Florida, Inc.*, 122 F.3d at 914.

¹⁰⁰ *Concrete Works IV*, at 69

based remedy only if the City has somehow participated in or supported that discrimination.”¹⁰¹

Second, is M/WBE utilization on public sector projects higher than on private sector projects simply due to the presence of an M/WBE program in the public sector, or is there evidence of private sector discrimination? This objection was raised by Judge Posner in the recent Cook County litigation.¹⁰² *Concrete Works IV*, however, expressly cited evidence from contractors that were used for business with the City of Denver but were not used by the same prime contractors for private sector contracts.¹⁰³

Third, the Cook County case also raised the issue of whether evidence that prime contractors simply do not solicit M/WBEs as subcontractors sufficient evidence of discrimination, or is it necessary to provide evidence that there is discrimination in hiring M/WBE subcontractors?¹⁰⁴ The court argued that evidence of failure to solicit M/WBEs was not the same as evidence of being denied the opportunity to bid. The court also stated that the anecdotal testimony was only sufficient to make the case against a few prime contractors and did not provide evidence of systematic bias in the industry as a whole. Nor was evidence provided that a general contractor awarded contracts to non-M/WBEs that were less qualified than MWBEs, or that bid a higher price.

Fourth, is evidence of private sector analysis simply another form of “societal discrimination” that lacks the specificity required by *Croson*? In *Engineering Contractors* one component of the factual predicate was a study that compared entry rates into the construction business for M/WBEs and non-M/WBEs. The analysis provided evidence that minorities and women entered the construction business at (statistically significant) rates

¹⁰¹ *Contractors Ass’n of Eastern Pennsylvania v. Philadelphia*, 91 F.3d 586, 602 (3d Cir 1996); see also *Webster v. Fulton County*, 51 F. Supp. 2d 1354 (ND GA 1999).

¹⁰² *Builders Assn of Greater Chicago v. County of Cook*, 2001 U.S. App. LEXIS 15066 (7th Cir 2001).

¹⁰³ *Concrete Works IV*, at 69.

¹⁰⁴ *Builder Assn of Chicago v. Cook County*, 123 F.Supp. 1087 (ND IL 2000).

lower than would be expected, given their numerical presence in the population and human and financial capital variables. The study argued that those disparities that persisted after the appropriate statistical controls were most likely the result of current and past discrimination.¹⁰⁵ But the court criticized this material for reliance on census data and the lack of particularized evidence of active or passive discrimination by Dade County.¹⁰⁶

Fifth, is evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program relevant to establishing a factual predicate for an M/WBE program? The Appeals Court in *Concrete Works IV* did find that such a decline in M/WBE utilization is evidence that prime contractors are not willing to use M/WBEs in the absence of legal requirements.¹⁰⁷ However, in *AGC v. Columbus* the district court noted that M/WBE utilization would have to fall below M/WBE availability in order to show that the M/WBE was not simply artificially propping up M/WBE utilization.¹⁰⁸

Finally, is evidence of capital market discrimination relevant to determining whether or not there is private sector discrimination? In *Adarand v. Slater* the district court did favorably cite such evidence of capital market discrimination as relevant to establishing the factual predicate for the federal DBE program.¹⁰⁹ However, in *Concrete Works III* Denver presented evidence of discrimination in the Denver metropolitan area commercial lending market. The argument was that banks had discriminatorily denied loans to M/WBEs, based in part on race and that the City had placed its funds into some of those institutions. The Appeals Court, however, in *Concrete Works IV* argued in overturning the district court decision that barriers to business formation were relevant insofar as this evidence demonstrated that M/WBEs are “precluded from the outset from competing for public

¹⁰⁵ Id. at 1573

¹⁰⁶ *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914.

¹⁰⁷ *Concrete Works IV* at 95.

¹⁰⁸ *AGC v. Columbus*, 936 F. Supp. 1363 (SD Ohio 1996).

¹⁰⁹ *Adarand v. Slater*, DC No 90-K-1413 (10th Cir 2000).

construction contracts.”¹¹⁰ Along these same lines, the Circuit Court in the Tenth Circuit also found evidence—from a regression analysis of census data—of disparities in self-employment and income from self-employment as relevant to showing barriers to M/WBE formation.¹¹¹

2.8 To Withstand Strict Scrutiny, an MBE Program Must Be Narrowly Tailored to Remedy Identified Discrimination

The discussion of the compelling interest in the court cases has been extensive, but the key issue is narrow tailoring. As David Straus, a law professor at the University of Chicago, noted when the Supreme Court first ruled on *Adarand* in 1995:

*The requirement that an interest be “compelling” is seldom what defeats a statute; over the years, the Supreme Court has found an enormous range of government interests to be “Compelling.” It is the requirement that a measure be “necessary” or “narrowly tailored” that has proved difficult to satisfy. States seldom have a difficult time advancing some obviously important interest that is arguably or plausibly promoted by a challenged law. What makes strict scrutiny effective is that it is difficult to show that the measure is an especially good way of promoting that objective.*¹¹²

In line with this insight the judicial review of many state and local M/WBE courts typically states that even if a compelling interest for the M/WBE program is found, the program is not narrowly tailored. This was the conclusion of the Third Circuit in *Contractors Association of Eastern Pennsylvania*.¹¹³

But at the same time, the federal courts (in *Adarand v. Slater*, *Sherbrooke Turf*, and *Gross Seed*)¹¹⁴ have found that the new DBE program, established pursuant to the regulations (49 CFR, Part 26) issued under The Transportation Equity Act (TEA-21) (1998)

¹¹⁰ *Concrete Works IV*, at 72. The district court rejected evidence of credit market discrimination as adequate to provide a factual predicate for an M/WBE program. *Concrete Works v. Denver*, 86 F.Supp. 2d 1042 (D Co. 2000).

¹¹¹ *Id* at 78.

¹¹² David Strauss, Affirmative Action and the Public Interest, *Supreme Court Review* (1995), at 29-30.

¹¹³ *Contractors Association of Eastern Pennsylvania, Inc., v City of Philadelphia*, 91 F.3d at 605.

¹¹⁴ *Adarand v. Mineta*, U.S. Supreme Court, *per curiam*, November 27, 2001; *Sherbrooke Sodding v. MDOT* (2001 US Dist Lexis 19565) (November 14, 2001); *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002).

is narrowly tailored to serve a compelling interest. Previously, the federal court had ruled that there was a factual predicate for the federal DOT DBE program, but the program was not narrowly tailored.¹¹⁵ These rulings provide some guidance as to what program configurations the courts will judge to be narrowly tailored.

Courts have identified the following elements of narrow tailoring remedial race-conscious program:¹¹⁶

- the utilization of race-neutral alternatives;
- the relationship between remedial goals and availability;
- program flexibility;
- the relationship between the remedies and the beneficiaries of those remedies;
- the impact on innocent third parties; and
- limited duration.

2.8.1 Race-Neutral Alternatives

Concerning race-neutral alternatives, the Supreme Court in *Croson* concluded that a governmental entity must demonstrate that it has evaluated the use of race-neutral means to increase minority business participation in contracting or purchasing activities.¹¹⁷ For example, the *Webster* court criticized Fulton County for not considering race-neutral alternatives in the 20 years of the program.¹¹⁸ However, strict scrutiny does not mandate that every race-neutral measure be considered and found wanting.¹¹⁹

¹¹⁵ In 1998 in *Sherbrooke I* the Minnesota district court had ruled that while there was a compelling interest for the DBE program the program was not narrowly tailored. In 1996, before the new DBE regulations, the district court in Colorado, upon remand from the 1995 U.S. Supreme Court, had made a similar ruling in *Adarand v. Peña*.

¹¹⁶ Pre-*Croson* case; see *U.S. v. Paradise*, 480 U.S. 149, 171 (1987).

¹¹⁷ *Croson*, 488 U.S. at 507.

¹¹⁸ *Webster*, 51 F.Supp. 2d at 1380. See also *Contractors Assn of Eastern Pennsylvania v. City of Philadelphia*, 91 F.3d at 609. *Drabik*, 214 F.3d at 738.

¹¹⁹ *Coral Construction*, 941 F.2d at 923, "While strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative"; see also *AGC of California*, 950 F.2d at 1417.

In this area the Courts have found the new DBE regulations to be narrowly tailored, in particular because of the emphasis that a granting agency “must meet the maximum feasible portion of [its] overall goal by using race-neutral means of facilitating DBE participation.”¹²⁰ Moreover, Congress explicitly considered race-neutral alternatives before adopting TEA-21.

2.8.1.1 What Constitutes a Race-Specific and Gender-Specific Business Preference Program?

Following the termination of M/WBE programs, a variety of approaches have been used to address M/WBE underutilization. Sometimes it is not clear whether certain programs are a race- or gender- specific or race- or gender-neutral programs.

2.8.1.2 Racial Classifications

Even after program termination an agency may continue to use racial classifications. So the question arises: Does the mere use of racial classifications violate race neutrality? The California Appeals Court for the Third Appellate District argued in *Connerly v. State Personnel Board*¹²¹) that simply because a law is race conscious does not mean that it necessarily invites strict scrutiny. The *Connerly* court gave the example of a law prohibiting racial discrimination in employment as being race conscious but as not being subject to strict scrutiny. Nevertheless, other racial classifications standing alone might trigger strict scrutiny. For example, the *Connerly* court indicated that granting a rebuttable presumption of disadvantage to an ethnic group is still a racial preference, at least for purposes of Proposition 209, because one group must prove its disadvantage while another group does not have to provide its disadvantage.

¹²⁰ *Adarand v. Slater*, at 21 [citing 49 CFR Sec 26.51(a)(2000)].

¹²¹ *Connerly v. State Personnel Board*, 92 Cal. App.4th 16 (2001) (relying on the U.S. Supreme Court voting rights decision in *Shaw v. Reno*, 509 U.S. 630, 647 (1993)).

Yet another form of racial classification is tracking M/WBE spending. (Under North Carolina state law the City of Charlotte must report certain information on M/WBE utilization to the State Historically Underutilized Business Office.¹²²) There are differences among the courts as to whether agencies can even report M/WBE spending. In *Barlow v. Davis* the California Court of Appeals upheld the governor's executive order preventing the State of California from collecting and reporting of data on M/WBE utilization. For the *Barlow* court the reporting requirement could not be severed from the affirmative action statute and was thus in violation of Proposition 209.¹²³ Similarly, the *Connerly* court found that the reporting scheme for the state community college system was "entirely bound up and intermixed with the success of the preferential hiring scheme" and hence an integral part of the unconstitutional preference program.¹²⁴ In a non-Proposition 209 case, the federal court prohibited the City and County of Denver from reporting M/WBE spending following the decision in *Concrete Works*.¹²⁵ As noted earlier, this ruling was overturned by the Court of Appeals for the 10th Circuit. No other M/WBE case (outside of the Proposition 209 cases) prohibited tracking M/WBE spending following program termination. And in the settlement of some cases, tracking of M/WBE spending was in fact required.¹²⁶

2.8.2 Relationship of Goals to Availability

Narrow tailoring under the *Croson* standard requires that remedial goals be in line with measured availability. For example, in *Webster* the district court found that the 35 percent goal is not adequately justified, particularly given the statistically insignificant

¹²² North Carolina General Statutes 143-128.

¹²³ *Barlow v. Davis*, 72 Cal. App.4th 1258, 1260 (1999).

¹²⁴ *Connerly v. State Personnel Board*, at 61. At the same time, in *Connerly* the California appeals court observed that tracking outcomes by race as a vehicle for detecting discrimination does not grant a preference in violation of Proposition 209.

¹²⁵ Order on Defendant's Post Trial Motions, *Concrete Works of Colorado v. City and County of Denver*, Civil Action No. 92-M-21, (March 29, 2000) ("The court also finds that provisions of Division 3 relating to the collection of data on MBEs and WBEs and the certification of MBEs and WBEs are not severable from the rest of Division 3 because they are linked fundamentally to the function and purpose of the unconstitutional goals program.")

¹²⁶ *Prior Tire v. Atlanta Public Schools*, No. 1-95-CV-825-JEC (ND GA 1997).

disparities.¹²⁷ Similarly, in *Associated Utility Contractors* the district court noted that “a percentage set-aside measure, like the M/WBE goals at issue here, can only be justified by reference to the overall availability of minority- and women-owned businesses in the relevant markets. In the absence of such figures, the 20 percent MBE and 3 percent WBE set-aside figures are arbitrary and clearly unenforceable in light of controlling Supreme Court and Fourth Circuit authority.”¹²⁸

In contrast, the courts have upheld the goal setting process for the DOT DBE program. The DOT DBE regulations require that goals be based on one of several methods of measuring DBE availability.¹²⁹ Moreover, there are built-in mechanisms to ensure that DBE goals are not set excessively high relative to DBE availability. For example, DBE goals are not even permitted if the overall goal is met for two consecutive years by race-neutral means.¹³⁰ And DBE contract goals must be reduced if overall goals have been exceeded with race-conscious means for two consecutive years.¹³¹

2.8.3 Flexibility

The two elements of flexibility are waivers and project goals that prevent a program from constituting a set quota. *Croson* favorably mentioned the contract-by-contract waivers in the federal DBE DOT program. Virtually all MBE programs have this waiver feature in their enabling statutes. For instance, King County's program permitted prime contractors to request a waiver of the MBE participation requirement when a non-MBE was the sole source of a good or service, or if no MBE was otherwise available or competitively priced. In addition, under the preference method, if no MBE was within 5 percent of the lowest

¹²⁷ *Webster*, 51 F.Supp.2d at 1379, 1381.

¹²⁸ *Associated Utility Contractors v. Baltimore*, 83 F.Supp2d 613, 622 (D Md 2000).

¹²⁹ 49 CFR, Section 26, Part 45

¹³⁰ 49 CFR, Section 26, Part 51(f)(3).

¹³¹ 49 CFR, Section 26, Part 51(f)(4).

bidder, a non-MBE was awarded the contract. Therefore, the Ninth Circuit concluded, "King County's MBE program is not facially unconstitutional for want of flexibility."¹³²

Similarly, it is important that project goals are not rigidly set. For example, the DOT DBE program provides for the setting of aspirational, not mandatory, goals. Quotas are expressly forbidden by the DBE regulations. Recipient agencies are no longer bound to the national 10 percent goal. For example, in *Sherbrooke Turf* the state DOT had a goal of 10 percent on one project and 1.2 percent on another project. In the new DBE regulations, overall goals are simply a framework for setting contract goals, if any. Goals are not required on every contract.¹³³ In fact, states are permitted to opt out of the goals (altogether nine state recipients have opted out of the program).¹³⁴ DBE goals are set based on local data on DBE availability.

2.8.4 Overinclusion

Narrow tailoring also involves limiting the number and type of beneficiaries of the program. As noted above there has to be evidence of discrimination to justify a group-based remedy for a particular group.

The regulations covering certification mean that the DBE program does not provide blanket protection to minorities. And DBEs must be present in the local market. There is some suggestion from the Supreme Court in *Adarand* that individual inquiry into disadvantage may be required for narrow tailoring with reference to the personal net worth requirements in the DOT DBE regulations.¹³⁵

¹³² Id. at 925.

¹³³ 49 CFR, Section 26, Part 51(e)(2).

¹³⁴ See www.osdbuweb/dot.gov/business/dbe/fhwagoal.html

¹³⁵ *Adarand VII*, slip op. at 21-22.

Another aspect of the overinclusion issue is that the MBE program must be limited in its geographical scope to the boundaries of the enacting jurisdiction.¹³⁶ The Supreme Court in *Croson* indicates that a local agency has the power to address discrimination only within its own marketplace. One fault of the Richmond MBE programs was that minority firms were certified from around the United States.¹³⁷ In *Coral Construction*, the Ninth Circuit concluded that the King County MBE program failed this aspect of the narrow tailoring requirement. Specifically, the definition of MBEs eligible to benefit from the program was overbroad; it included MBEs that had no prior contact with King County provided the MBE could demonstrate that discrimination occurred "in the particular geographic areas in which it operates."¹³⁸ This MBE definition suggested that the program was designed to eradicate discrimination not only in King County but also in the particular area in which a nonlocal MBE conducted business. In essence, King County's program focused on the eradication of societywide discrimination, which is outside the power of the state or local entity. Since "the County's interest is limited to the eradication of discrimination within King County, the only question that the County may ask is whether a business has been discriminated against in King County."¹³⁹

In clarifying an important aspect of the narrow tailoring requirement, the court defined the issue of eligibility for MBE programs as one of participation, not location. For an MBE to reap the benefits of an affirmative action program, the business must have been discriminated against in the jurisdiction that established the program.¹⁴⁰ As a threshold matter, before a business can claim to have suffered discrimination, it must have attempted

¹³⁶ *Id.*

¹³⁷ *Croson*, 488 U.S. at 508.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

to do business with the County.¹⁴¹ It is significant that "if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business in the County."¹⁴²

According to the court, the presumptive rule requires that the enacting governmental agency establish that systemic discrimination exists within its jurisdiction and that the MBE is, or attempted to become, an active participant in the agency's business community.¹⁴³ Since King County's definition of MBE permitted participation by those with no prior contact with King County, its program was overbroad.

2.8.5 Burden on Third Parties

Narrow tailoring also necessitates limiting the burden of the program on third parties. Waivers are one tool that serves this purpose. Another tool is the good faith compliance provisions in the DBE regulations that allow prime contractors to not meet the goal if they attempted to comply in good faith.¹⁴⁴ Finally, the DOT DBE regulations seek to reduce the program burden on non-DBEs by avoiding DBE concentration in certain areas,¹⁴⁵ and allowing for the inclusion of nonminority DBEs in the DBE program itself.

2.8.6 Program Duration

Narrow tailoring requires some form of sunset provision. In *Webster v. Fulton County* the district court noted that the program had been in place for 20 years with no contemplation of expiration.¹⁴⁶

The DOT DBE had a variety of sunset and program termination provisions. First, the program as a whole is over in 2004. Second, DBEs can participate in the program for only

¹⁴¹ Id.

¹⁴² Id.

¹⁴³ Id.

¹⁴⁴ 49 CFR, Section 26, Part 53.

¹⁴⁵ 49 CFR, Section 26, Part 33.

¹⁴⁶ *Webster v. Fulton County*, 51 F.Supp. at 1382.

ten and a half years. Third, annual certification involving personal net worth and business size limitations is required to ensure continued program eligibility.¹⁴⁷ Finally, the program is terminated if it meets annual DBE goals for two years entirely through race-neutral means.

2.9 State Law Considerations

North Carolina is not a home rule state. Consequently, procurement policies of local governments in North Carolina are limited in what can be undertaken absent express authorization by the State General Assembly. The specifics of state procurement law are discussed in more detail in the procurement chapter below. The development of an M/WBE program of the City of Charlotte was authorized by Senate Bill 290, Chapter 344 in 1987. This bill provided an exception for Charlotte to the state's public bidding laws contained in G.S. 143-129. Hence, after 1987 the Charlotte M/WBE program was not subject to challenge under the state competitive bidding statutes.

On the other hand, since 1989, local government bodies subject to GS 143-123 have been required to implement a program promoting minority business utilization. Details of these requirements are also discussed in the procurement policy chapter below.

2.10 Small Business Procurement Preferences

Small business procurement preferences have existed since the 1940s. The first small business program had its origins in the Smaller War Plants Corporation (SWPC) established during World War II.¹⁴⁸ The SWPC was established to channel war contracts to small business. In 1947, Congress passed the Armed Forces Procurement Act, declaring that: "It is the policy of Congress that a fair proportion of the purchases and contracts under

¹⁴⁷ A provision cited favorably in *Gross Seed v. Nebraska Department of Roads*, at 19.

¹⁴⁸ See, generally, Thomas J. Hasty III, "Minority Business Enterprise Development and the Small Business Administrations 8(a) Program: Past, Present, and (Is There a) Future?" *Military Law Review* 145 (Summer 1994): 1-112.

this chapter be placed with small business concerns."¹⁴⁹ Continuing this policy, the 1958 Small Business Act requires that government agencies award a "fair proportion" of procurement contracts to small business concerns.¹⁵⁰ The regulations are designed to implement this general policy.¹⁵¹

Section 8(b)(11) of the Small Business Act authorizes the SBA to set aside contracts for placement with small business concerns. The SBA has the power:

*to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be made to small-business concerns, and to insure a fair and equitable share materials, supplies, and equipment to small-business concerns.*¹⁵²

Every acquisition of goods and services anticipated to be between \$2,500 and \$100,000 is set aside exclusively for small business unless the contracting officer has a reasonable expectation of fewer than two bids by small businesses.¹⁵³

2.10.1 Challenges to Federal Small Business Procurement Programs

There has been only one constitutional challenge to the long-standing federal SBE programs. In *J. H. Rutter Rex Manufacturing v. United States*,¹⁵⁴ a federal vendor unsuccessfully challenged the Army's small business set-aside as in violation of the due process clause of the Fifth Amendment to the U.S. Constitution, as well as the Administrative Procedures Act and the Armed Forces Procurement Act.¹⁵⁵ The vendor argued that the small business program deprived it of a property interest without due

¹⁴⁹ 10 U.S.C. § 2301 (1976).

¹⁵⁰ 15 USC 631(a).

¹⁵¹ See 32 C.F.R. §§ 1-701.1 to 1-707.7.

¹⁵² 15 U.S.C. § 637(b)(11).

¹⁵³ *Federal Acquisition Regulations* 19.502-2.

¹⁵⁴ 706 F.2d 702(5th Cir 1983), cert denied 464 U.S. 1008 (1983).

¹⁵⁵ Administrative Procedures Act, 5 U.S.C. §§ 552(a)(1)(E) (1976) and the "fair proportion" language of the Armed Forces Procurement Act, 10 U.S.C. § 2301 et seq. (1976), and the Small Business Act, 15 U.S.C. § 631 et seq. (1976).

process of law because the program reduced the number of contracts on which larger vendors are able to bid.¹⁵⁶

The federal appeals court held that there is not a constitutional right granted to private vendors to contract with the government on the basis of competitive bidding.¹⁵⁷ The court ruled, "We are unaware of a single independent source in either state or federal law which would support Rutter Rex's claim of a Fifth Amendment property entitlement to participate in the awarding of government contracts."¹⁵⁸ Moreover, the appeals court responded that the "Supreme Court has long recognized the special judicial deference due administrative agencies in the area of procurement."¹⁵⁹ The government, like private individuals and businesses, has the power "to determine those with whom it will deal, and to fix the terms and conditions upon which it will make needed purchases."¹⁶⁰ Similarly, the Comptroller General has interpreted the Small Business Act as allowing for premium prices to be paid to small businesses.¹⁶¹

The court held that classifying businesses as small was not a "suspect classification" subject to strict scrutiny. Instead the court ruled:

*Since no fundamental rights are implicated, we need only determine whether the contested socioeconomic legislation rationally relates to a legitimate governmental purpose... Our previous discussion adequately demonstrates that the procurement statutes and the regulations promulgated there under are **rationally related** to the sound legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation.¹⁶² (emphasis added)*

¹⁵⁶ Congressional opponents of small business set-asides had made a similar Fifth Amendment argument in 1961-62 when legislation was introduced to repeal small business set-asides at the behest of the Association of General Contractors of America (AGCA). See Jonathon Bean, "Big Business and Affirmative Action" (2001), at 29-31.

¹⁵⁷ See also *Ray Baillie*, 477 F.2d at 709 ("There is no constitutional duty to offer government procurement contracts for competitive bidding."); *Crown Zellerbach Corp. v. Marshall*, 441 F. Supp. 1110 (E.D.La.1977) (denying preliminary injunction requiring government to contract with firms not meeting standard for affirmative action plan).

¹⁵⁸ *J. H. Rutter Rex Manufacturing*, at 713.

¹⁵⁹ *J. H. Rutter Rex Manufacturing*, at 707 [citing *Perkins v. Lukens Steel Co.*, 310 U.S. 113, 127-28 (1940)].

¹⁶⁰ See also *Perkins*, 310 U.S. at 127, 60 S. Ct. at 876.

¹⁶¹ *Osmose Wood Preserving Co.*, 78-2 CPD Para 24 (Oct. 23, 1978).

¹⁶² *J. H. Rutter Rex Manufacturing*, at 730. See also *Dandridge v. Williams*, 397 U.S. 471, 90 S. Ct. 1153, 25 L. Ed. 2d 491 (1970).

The rational relationship test is a more relaxed standard of judicial review that holds that the courts will not second guess a legislative enactment if a rational basis is provided for the rule in question.

There are various dicta in subsequent U.S. Supreme Court cases also subjecting small business procurement programs to a relaxed standard of judicial review. For example, in *Adarand v. Pena*, the U.S. Supreme Court stated:

The Government urges that "[t]he Subcontracting Compensation Clause program is . . . a program based on disadvantage, not on race," and thus that it is subject only to "the most relaxed judicial scrutiny." Brief for Respondents 26. To the extent that the statutes and regulations involved in this case are race neutral, we agree.¹⁶³ (emphasis added)

There is one case where the Comptroller General did object to a specific set-aside (not small business set asides in general), where a small company dominated a market because of its unique capacity to meet government needs.¹⁶⁴ In this instance the firm was small in absolute terms but not relative to other firms in its market niche.

A large number of state and local governments have maintained small business preference programs for many years.¹⁶⁵ No state or district court cases were found overturning a state and local small business reference program. One reason for the low level of litigation in this area is that there is not significant organizational opposition to SBE programs. There are no reported cases of AGC litigation against local SBE programs. And the legal foundations that have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.¹⁶⁶

¹⁶³ *Adarand v. Pena*, 513 U.S. 1108 (1995).

¹⁶⁴ *Charles Beseler*, 62 Comp Gen. 637 (1983).

¹⁶⁵ For example, Florida started a small business preference program in 1985 (FL St Sec. 287), Minnesota in 1979 (Mn Stat 137.31), New Jersey in 1993 (N.J.S.A 52:32-17).

¹⁶⁶ See, e.g., Southeastern Legal Foundation, "Race Neutral Alternatives for the City of Atlanta M/WBE Program" (July 1999) (promoting Miami's SBE goals program), www.southeasternlegal.org/library/aa/specialreportaa; see also Pacific Legal Foundation, Press Release re Los Angeles County, May 2001 ("There's no problem with the county's affirmative action program in contracting to the extent its goals include greater participation of 'disadvantaged and disabled veteran-owned businesses.'") www.pacificlegal.org/press_releases

2.11 Antidiscrimination Legislation

Most localities have provisions outlawing discrimination in employment. Some jurisdictions are now adding provisions that ban discrimination in business transactions.¹⁶⁷ This is discussed in greater detail in the recommendations section. No cases were found challenging these programs.

2.12 Conclusion

As summarized earlier, when developing and implementing a race- or gender-conscious program, it is crucial to understand the case law that has developed in the federal courts. These cases establish specific factors that must be addressed in order for such programs to withstand judicial review. Before instituting affirmative action programs, the governmental entity involved must engage in a specific fact-finding process to compile an evidentiary foundation. It is also important to understand the kinds of evidence that will be necessary and acceptable to provide a sufficient factual predicate for a race- or gender-conscious program. Ultimately, MBE and WBE programs can withstand muster if enacting jurisdictions comply with the requirements outlined by the Supreme Court and other relevant lower court cases. In the most important example, the federal DBE programs have been found to be narrowly tailored. In contrast, SBE programs face negligible risk of attack on constitutional grounds. How antidiscrimination legislation for business transactions will be treated is still an open question.

¹⁶⁷ Seattle and San Diego are among the cities that have adopted such legislation.

**3.0 REVIEW OF CONTRACTING
POLICIES, PROCEDURES, AND
PROGRAMS**

3.0 REVIEW OF CONTRACTING POLICIES, PROCEDURES, AND PROGRAMS

This chapter focuses on policies and procedures used by the City of Charlotte to purchase goods and services. The purpose of this chapter is to provide a description of the procurement and contracting environment in which M/WBEs (minority and women business enterprise) operate; identification of procurement barriers, if any, to M/WBE utilization; background for the data analysis; and foundations for the report recommendations. This chapter also reviews the structure and operations of the Minority and Women Business Development (MWBD) program during the study period 1998–2002. The MWBD program ended in early 2002. Nevertheless, this study is interested in the activities the MWBD program did undertake during the study period. In addition, this chapter discusses the race-neutral efforts the City is currently in the process of implementing, such as the Small Business Enterprise (SBE) program and the Commercial Non-Discrimination Policy. The following areas of procurement are included in this chapter:

- Construction;
- Professional Services;
- Other Services; and
- Goods and Supplies.

Section 3.1 describes the methodology used to conduct the review of contracting policies, procedures, and programs. Section 3.2 contains a summary of the authorities that govern contracting and purchasing within the City of Charlotte and a discussion of the organization of Charlotte’s purchasing function. Sections 3.3 through 3.7 present an analysis of the purchasing policies and procedures of the Procurement Services Department. Where relevant, the impact of certain policies on M/WBE is noted. Sections 3.8 through 3.9 cover programs to assist small, female, and minority-owned businesses.

3.1 Methodology

This section will discuss the steps taken to analyze the City's contracting and purchasing policies, procedures, and programs and evaluate the extent to which Charlotte's race- and gender-based programs, Charlotte's race- and gender-neutral programs, and Charlotte's certification process facilitate or hamper M/WBE participation. The focus of this review is on elements of the purchasing process, including remedial programs, that impact on M/WBE utilization. The analysis included the following steps:

- Collect, review, and summarize Charlotte contracting and purchasing policies currently in use. Discuss with managers the changes that contracting and purchasing policies have undergone during the FY 1998–2002 time frame and their effects on the remedial programs.
- Develop questionnaires and conduct interviews of key City contracting and purchasing staff and officials to determine how existing contracting and purchasing policies have been implemented. Interviews were conducted with City management and staff regarding the application of policies, discretionary use of policies, exceptions to written policies and procedures, and the impact of policies on key users. The Interview Guide for Staff is presented in Appendix A.
- Review applicable City ordinances, regulations, resolutions, and policies that guide the remedial programs. Discuss with appropriate personnel in the City as well as program participants, the operations, policies, and procedures of the remedial programs. Discuss the changes over time of the remedial program. The policies and procedures reviewed are limited to those provided by the City.
- Interview program participants and nonparticipants to determine whether barriers exist within Charlotte's contracting and purchasing procedure and program. Interviews also were conducted with external users (M/WBE and non-M/WBE firms) to determine the impact of Charlotte policies and procedures on firms doing business with Charlotte or attempting to do business with Charlotte. In conducting interviews with external users, the study team solicited perceptions, opinions, and facts related to access to information and application of policies, procedures, and practices that inhibit the ability of firms to participate in contracting and purchasing with Charlotte. In instances where anecdotal information was provided related to policies or practices that created problems or barriers to participation, MGT conducted additional research in order to document and corroborate the anecdotal information.

- Analyze the effect of City contracting and purchasing procedures on the utilization of program participants by the City.

In addition to the above methodology, MGT also collected and reviewed copies of previous disparity studies conducted in the geographic region and conducted a comprehensive review of race- and gender-neutral programs.

Overall, MGT conducted 18 interviews with current and former City staff. These interviews were conducted in December 2002 through February 2003. City documents collected and reviewed for this portion of the study are shown in **Exhibit 3-1**.

**EXHIBIT 3-1
DOCUMENTS REVIEWED AS PART OF POLICY AND PROCEDURE REVIEW**

Index	Description
1.	MWBD Stakeholder Committee, <i>Interim Program Recommendations, City of Charlotte Small Business Enterprise Program</i> , June 3, 2002
2.	Southeastern Legal Foundation, <i>Special Report for Charlotte, NC, Legal, Race-Neutral Alternatives for Local Government Affirmative Action</i> , 2002
3.	City of Charlotte, <i>SBE/M/WBE Certification Application</i> , January 10, 2003
4.	City of Charlotte, Business Support Services, <i>Minority and Women Business Development Program (MWBD) Annual Report, FY 2000</i>
5.	City of Charlotte, Business Support Services, <i>Minority and Women Business Development Program (MWBD) Annual Report, FY 2001</i>
6.	City of Charlotte, Office of Small Business Opportunity, <i>Small Business Opportunity Program</i>
7.	City of Charlotte, <i>Commercial Non-Discrimination Ordinance</i> (draft)
8.	Neighborhood Development, <i>Business Plan Fiscal Year 2003</i>
9.	City of Charlotte, Small Business Development Program, <i>Contracting Opportunities-December 2002</i>
10.	Contract Compliance, Inc, <i>City of Charlotte, (MWBD) Program Certification Report 2001 Annual Report</i>
11.	D.J. Miller & Associates, <i>City of Charlotte MWBD Disparity Study</i> , October 1993
12.	Charlotte Mecklenburg Utility Department, <i>Construction Goals</i> , June 13, 2001
13.	City of Charlotte, <i>MWBD Goal Setting Procedure Procurement</i> , June 14, 2001
14.	City of Charlotte, <i>MWBD Program (1997)</i>
15.	<i>FY 2002 Disadvantaged Business Enterprise (DBE) Methodology for Charlotte Douglas International Airport</i> (undated)
16.	Division of Minority and Small Business Assistance, <i>Strategic Plan—Summary & Status</i> (undated)

**EXHIBIT 3-1 (Continued)
DOCUMENTS REVIEWED AS PART OF POLICY AND PROCEDURE REVIEW**

Index	Description
17.	City of Charlotte/Mecklenburg County, Business Support Services Procurement Services Division, <i>Policies and Procedures</i> , August 1, 2001
18.	City of Charlotte/Mecklenburg County, Business Support Services Procurement Services Division, <i>Policies and Procedures Manual</i> , August 1, 2002
19.	Franklin Lee, <i>The City of Charlotte: A Review of Current City Contracting and Procurement Practices with Recommendations for Enhancing Small Business Participation</i> , November 19, 2002
20.	City of Charlotte, Technology Request Planning Worksheet, FY 2004-2005
21.	City of Charlotte, Business Support Services Memorandum, <i>FY 2002 Year End Competition Report</i>
22.	City of Charlotte, <i>Five Year Competition/Privatization Plan FY 2003-2007</i>
23.	Charlotte Business Support Services, Information Technology Division, <i>Vendor Management System: Training Manual</i> (undated)
24.	City of Charlotte, <i>FY 03 Balanced Scorecard Initiatives: Supporting Work Plan Assignments</i>
25.	City of Charlotte, Business Support Services, Procurement Services Division, <i>How to Do Business with the City of Charlotte</i> , undated
26.	Architects, Engineers and Surveyors Notification List Packet.
27.	October 2002 issue of the Transit Authority Newsletter, The "Links"
28.	Charlotte Area Transit System <i>Procurement Policies</i> , July 26, 2002
29.	Neighborhood Development Division's <i>FY 2003 Business Plan</i>
30.	Draft of the Contract Process for Engineering & Property Management's contract section
31.	<i>Balanced Scorecard FY 03-Business Support Services-1st Quarter Status Report</i>
32.	Charlotte Mecklenburg Procurement Services, <i>Buyer's Guide for City Employees</i>
33.	Bob Hagemann, Memorandum, City Personnel Involved in City Contracting, September 20, 1996
34.	An Act Regarding the Procedure for Letting Public Contracts by the City of Charlotte, 1995 North Carolina Laws Ch. 273 (SB 708)
35.	An Act to Authorize the City Manager of Charlotte to Waive the Requirement for Bid Deposits on Bids for Equipment, Material and Supplies, and Concerning Construction of Mecklenburg Stadium, 1987 North Carolina Laws Ch. 329 (SB 319)
36.	An Act to Authorize the City Manager of Charlotte to Reject Bids When Appropriate Without Action by the Charlotte City Council, 1987 North Carolina Laws Ch. 151 (HB 487)
37.	An Act to Amend the Charter of the City of Charlotte to Authorize the City to Purchase Telecommunications, Data Processing and Data Communications Equipment, Supplies and Services on a Request for Proposal Basis, 1993 North Carolina Laws Ch. 196 (HB 882)
38.	Resolution of the Charlotte City Council Regarding Waiver of Bond Requirements for Purchase Requirements (February 12, 2001)

**EXHIBIT 3-1 (Continued)
DOCUMENTS REVIEWED AS PART OF POLICY AND PROCEDURE REVIEW**

Index	Description
39.	Resolution of the City Council of the City of Charlotte Authorizing the City Manager or his Designee to Award Contracts that Do No Exceed \$100,000, Resolution Book 34, November 27, 1995
40.	Resolution Relating to Purchasing of Computer Network Infrastructure Hardware and Software Components and Equipment through State Term Contracts (February 24, 1997)

3.2 Organization of the City of Charlotte Purchasing Function

3.2.1 Summary of Charlotte Governing Authorities

As noted in the legal chapter above, North Carolina is not a home rule state. Because local governments in North Carolina are created by the State Legislature, they need legislative authorization to act. A series of North Carolina statutes grant local governments the power to purchase goods and contract for services. Consequently, state procurement law sets key parameters for purchasing and contracting by the City. For example, City preferences that interfere with the “lowest responsible bidder” standard for contract award for formal contracts (discussed below) require state approval. The statutory framework for local government purchasing is contained in North Carolina General Statutes, Chapter 143, and specific legislation directed at the City. State procurement law impacts primarily on the purchase of goods and construction contracts.

Charlotte does not have a purchasing ordinance. The Procurement Services Division of the City of Charlotte has produced a *Policy and Procedures Manual* for procurement.¹

¹ State law does not require a policy manual.

The City operates under a council-manager form of government. The City Council and mayor determine policy decisions, allocate funds, and determine property tax rates. The City is organized into Key Business Units (KBUs). There are 14 KBUs in Charlotte city government in total.

- Aviation
- Budget & Evaluation
- Business Support Services
- Charlotte-Mecklenburg Planning
- Charlotte-Mecklenburg Police
- Charlotte-Mecklenburg Utilities
- Engineering and Property Management
- Finance
- Fire
- Human Resources
- Neighborhood Development
- Solid Waste Services
- Charlotte Area Transit System
- Transportation

3.2.2 Authorization and Delegation for Contract Awards

The Charlotte City Council has full signature authority for all City contracts. The City Council has delegated award authority for purchases below certain dollar thresholds provided in **Exhibit 3-2** below.

**EXHIBIT 3-2
CONTRACT AWARD AUTHORIZATION LEVELS
CITY OF CHARLOTTE, 2002**

Dollar Range	Award Authority
In excess of \$100,000	City Council
\$50,001-\$100,000	City Manager's Office
\$5,001-\$50,000	Key Business Unit Executive, or City Manager designee
\$5,000 or less	Designee of Key Business Unit Executive

Source: *Policies and Procedures Manual*, Procurement Services Division, Charlotte-Mecklenburg, 2002

3.2.3 Organization of the Charlotte-Mecklenburg Purchasing Function

The Procurement Services Division makes purchases of goods and services for the City of Charlotte and Mecklenburg County. The Procurement Services Division is a division of the City's Business Support Services KBU. The City of Charlotte and

Mecklenburg County signed a Memorandum of Agreement on joint purchasing in 1969. Charlotte Area Transit System (CATS), which handles public transit for the City and County, did participate in City-County centralized purchasing until recently and now has its own purchasing director and its own *Procurement Policies* Manual.

City purchasing and contracting are also shaped by the City's philosophy of performance management and strategic planning. Charlotte began implementing the "balanced scorecard" in 1994.² Initially developed for the private sector, the City of Charlotte pioneered the application of the balanced scorecard to public sector performance measurement. The balanced scorecard model of management engineering seeks to align an organization with its strategy by identifying key initiatives necessary to realize that strategy and mobilize the organization's staff. The City's performance management approach consists of translating City Council focus areas through its Corporate Scorecard. Promoting economic opportunity is one of the City Council focus areas. Within that focus area "establishing and aligning the City's existing small business assistance programs with the new Small Business Enterprise program" is one of the stated challenges facing the economic opportunity focus area.

Another element of the City's balanced scorecard approach is that all KBUs are required to have a five-year competition plan to determine what tasks should be contracted out to vendors. The City has established a Privatization and Competition Advisory Committee to guide the outsourcing of City work. For example, Key Businesses competition/privatization plans for FY 2000 identified 33 services with an annual value of

² Kaplan, R.S. and D.P. Norton, *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press, 1996. This approach has been used by over 50 percent of Fortune 1000 companies.

\$23 million to be outsourced during the fiscal year. City employees are allowed to bid on these services, and on occasion are awarded these contracts.

3.2.4 Engineering and Property Management Department

Building construction is handled by Engineering and Property Management and not the Procurement Services Division. The Contracting Services section in the Business Services Division of Engineering and Property Management handled MWBD program issues for Engineering and now handles the SBE program. Mecklenburg County maintains its own separate engineering department. Neighborhood Development, CMUD, CATS, the Aviation Department, and Charlotte Department of Transportation are the main sources of construction contracts for the City.

3.3 Methods of Procurement for Goods

The method of procuring goods can have a significant impact on the participation of newer and/or smaller businesses in government contracting. The type and dollar amount of the goods contract are prime factors in determining the method of solicitation. Broadly speaking, the types of purchasing and contracting can be divided into goods, construction contracts, and service contracts. The procurement of goods is discussed first, followed by services and construction.

3.3.1 Formal Bids

North Carolina state law currently requires that competitive sealed bids be used for purchases or lease-purchases of supplies, materials, equipment, and apparatus in excess of \$90,000.³ Through special legislation enacted in 1995, the North Carolina

³ NC GS § 143-129(a). This limit was raised from \$30,000 in 2001. A formal bid is a bid that must be submitted in a sealed envelope, in a prescribed format, and opened at a specified time. CATS uses formal competitive processes for procurement of construction, repair, supplies, materials, and equipment in excess of \$5,000. Charlotte Area Transit Authority *Procurement Policies*, July 26, 2002. Leases are not subject to the formal bidding rules.

General Assembly increased Charlotte's formal bidding threshold for supplies, materials, equipment, and apparatus to \$100,000. Agencies cannot subdivide purchases to avoid the threshold for formal bidding.⁴ Services are not covered by this requirement.⁵ The two types of competitive bids are Invitations to Bid (ITBs)/competitive sealed bids and competitive sealed proposals.

ITBs⁶

All ITBs must be publicly advertised. Bidders must submit sealed bids that include Bid Certification Forms, Nondiscrimination Provisions and Subcontractor/ Supplier Utilization forms. Sealed bids are opened publicly and awarded to the "lowest responsible bidder or bidders, whose bid meets the requirements and criteria set forth in the invitation for bids, taking into consideration quality, performance, and the time specified in the proposal for the performance of the contract."⁷ Contracts issued pursuant to ITBs must be in writing. Performance bonds, with a provision for waiver, were required for formal contracts for goods in excess of \$100,000. That requirement was ended in 2002. There are no minimum required number of bids for competitive bids for goods, supplies, and equipment.

Public Advertising and Formal Bids

The extent of outreach through advertising can impact the opportunities for small, newer firms. The public advertising requirement is a formality that bids have to be in the regional newspapers at least seven days in advance of bid opening. There is no legal requirement to send solicitations to a vendors or bidders list. The City advertises in *The Charlotte Observer* and produces *Contract Opportunities List*, a two- to three-month

⁴ NC GS § 143-133.

⁵ In determining whether or not purchases of mixed goods and services fall under the purview of competitive bidding requirements, courts look at the "predominant aspect" of the purchase. See, e.g., *Plant Food v. Charlotte*, 214 NC 518 (1938).

⁶ NC GS § 143-129; City of Charlotte/Mecklenburg County, *Policies and Procedures Manual*, August 1, 2002, Article 5, Section I-1.

⁷ City of Charlotte/Mecklenburg County, *Policies and Procedures Manual*, August 1, 2002, at 11.

forecast of bid opportunities. Some effort has been made to advertise bids in media targeting the minority community, including the monthly City/County MWBD newsletter and *The Charlotte Post*.

The North Carolina state procurement statute was changed recently to allow electronic advertising.⁸ The governing board must approve bids that are advertised solely through electronic means. The City does post 94 percent of its formal bid solicitations on the North Carolina interactive purchasing system (ips.state.nc.us).⁹ All RFPs for contracts in excess of \$100,000 are advertised on the state interactive purchasing system.

Statutory Exceptions to Competitive Bidding

Exceptions to competitive bidding requirements under North Carolina state law include:¹⁰

- competitive bidding group purchasing programs;¹¹
- purchases from other government units;¹²
- solid waste (use RFPs);¹³
- sole source contracts;^{14*}
- gas fuel oil (use informal methods);¹⁵
- used equipment;¹⁶
- contracts established by the state;^{17*}
- guaranteed energy savings contracts;
- information technology contracts through the State Office of Information Technology Services;^{18*}

⁸ NC GS § 143-129(a).

⁹ *Balanced Scorecard FY 03-Busines Support Services-1st Quarter Status Report*.

¹⁰ NC GS § 143-129(e).

¹¹ NC GS § 143-129(e)(3).

¹² NC GS § 143-129(e).

¹³ NC GS § 143-129.2.

¹⁴ NC GS § 143-129(f).

¹⁵ NC GS § 143-131.

¹⁶ NC GS § 143-129(e)(10).

¹⁷ NC GS § 143-129(e)(9).

¹⁸ NC GS § 147-33.82(b).

- piggybacking;^{19*}
- construction management at risk;^{20*} and
- emergency procurement.^{21*}

Procurement methods indicated by an asterisk (*) are discussed later in this section.

3.3.2 Informal Bids (\$5,000 To \$100,000)

Informal bids are required for purchases between \$5,000 and \$100,000. North Carolina State law does not specify what procedure has to be used by local governments for informal bids.²² North Carolina law does provide that informal bids be awarded to the “lowest responsible bidder,”²³ but does not require public advertising, or a minimum number of bids. The *Policy and Procedures Manual* provides that advertising is not required for informal bids unless a competitive procedure is adopted. The City uses two methods for informal bids: competitive sealed bids and quotations (fax, e-mail or telephone). The City generally seeks a least three quotes for informal bids, although this is not required by state law. City buyers have typically relied on lists of their own devising for soliciting quotations. Informal bids generally are not posted on the City or state procurement Web sites.

M/WBE participation in informal contracts was a persistent theme in MWBD program review. Some staff interviews suggested that buyer reliance on lists of their own construction constitutes a barrier to new vendors attempting to compete with incumbent vendors, particularly in the absence of publicly available data on winning bids in informal contract awards. In 2001 the MWBD Office Annual Report also projected seeking out

¹⁹ NC GS § 143-129(g).

²⁰ NC GS § 143-128.1.

²¹ NC GS § 143-129(a).

²² NC GS § 143-141.

²³ NC GS § 143-141.

more informal opportunities for M/WBEs.²⁴ The MWBD program called for KBUs to direct informal opportunities to M/WBEs to the greatest extent possible.

3.3.3 Direct Purchases

City departments are allowed to directly purchase a specified list of supplies materials and equipment without going through the Procurement Service Division.²⁵ There was concern expressed in several staff interviews that in making direct purchases KBUs relied on their own established vendors to the detriment of new vendors and M/WBEs. M/WBE utilization by department is reported in Chapter 6.0 to determine if these concerns are in fact reflected in the contract data.

3.3.4 Informational Technology

North Carolina state procurement law provides for special procedures for the procurement of and lease of telecommunications, data processing, and data communications equipment, supplies, and services.²⁶ A City of Charlotte charter amendment approved special procedures for technology purchases in 1993.²⁷ These special provisions exempt the procurement of certain technology goods and services from competitive bidding. City technology procurement does require public advertising seven days prior to bid opening and sealed bids when specified in the RFP or ITB. Technology proposals must include information on bidder experience, bidder ability to secure financing, project staffing, cost elements, and system design and related factors. Contracts are awarded to the “best overall proposal” rather than “lowest responsible bidder.” The state rules governing technology procurement also allow for negotiation to

²⁴ City of Charlotte, *Business Support Services, Minority and Women Business Development Program (MWBD) Annual Report, FY 2000*.

²⁵ Association dues, care of prisoners, concession supplies, government publications, support of children, printing of legal briefs, library purchases, utility payments, legal and attorney office payments, bond services, clothing allowances for personnel, rental payments for property, safety deposit boxes, refunds (including taxes and bid deposits), and renewal maintenance agreements. City of Charlotte/Mecklenburg County, *Policies and Procedures Manual*, August 1, 2002, Article 5, Section IV.

²⁶ NC GS § 143-129.8.

²⁷ NC HB 882, ch 196.

obtain the final contract, but negotiation cannot be used to alter the scope of the proposal to such an extent that it would deprive other bidders of a fair opportunity to compete.

3.3.5 Piggybacking

North Carolina state law allows for purchases from any supplier that has entered into a contract to furnish the item to a federal agency, state agency, or any political subdivision of a state within the past 12 months when approved by the Charlotte City Council.²⁸ The piggybacking exception applies to the purchases of supplies, materials, and equipment of \$100,000 or greater. Piggybacking cannot be used for construction or repair contracts, or contracts subject to informal bid requirements under the North Carolina bid statute. Piggybacking purchases must be on terms at least as favorable as the previous contract and be the result of contracts awarded by a process “substantially similar” to that required by the North Carolina bid statute. The City is required to make a public notice of its intention to award the contract without bidding.

The City purchasing staff itself avoids the use of piggybacking because it believes that as a large municipal government with solid negotiating leverage, the City can generally obtain more favorable terms than would be won under the typical piggybacked contract award. Procurement staff suggested that piggybacking was employed more often by smaller departments that are short on staff and/or time. CATS has used piggybacking contracts for buses and the City has used piggybacking for fire protective clothing.

3.3.6 Price Agreements

Price agreements, or blanket purchase orders, are used for recurring requirements for specific items over a given time period. In these instances, a single competitive

²⁸ NC GS § 143-129(g). The City Council cannot delegate the authority to award piggy-backed contracts.

procedure can be used rather than repetitive requisitions. Although these agreements reduce the number of times an item is put out to bid, staff interviews did not indicate that price agreements had been an obstacle to M/WBE utilization by the City.

3.3.7 Procurement Cards (P-Cards)

Procurement cards are credit cards used for low dollar value items (less than \$500). The p-card was piloted in CMUD and then expanded to other departments. By 2002, all but two KBUs used the p-card. Actual p-card use varies widely among departments.

It is challenging to promote and track M/WBE utilization in p-card transactions. The MWBD office did write articles encouraging the use of M/WBEs for p-card transactions, but the MWBD office has not provided lists of SBE/M/WBE vendors where the p-card could be used. Nor has the City tracked procurement card spending with SBEs or M/WBEs.

3.3.8 Sole Source

North Carolina purchasing law allows for sole sourcing of contracts when

- competition is not available;
- there is only one source of supply; or
- standardization or compatibility is the paramount consideration.²⁹

Sole source contracts in excess of \$100,000 must be approved by the City Council, and a written record of sole source procurement must be maintained. The City Council cannot delegate the authority to award sole source contracts.

Sole source procurement can be a vehicle for limiting the utilization of M/WBE vendors in government purchasing. Staff interviews report that sole source procurement has rarely been used by the City. During the study period, sole source was reportedly used primarily for 9/11-related security needs and computer-aided dispatch. The

²⁹ NC GS § 143-129(e)(6).

requirement of City Council approval has generally served as a disincentive to use sole source procurement.

3.3.9 State Contract Participation

Under North Carolina law the City can purchase from vendors operating under state contract.³⁰ The City can buy off state contract if the vendor extends the same prices, terms, and conditions to the City.

While the use of state contracts can be a timesaving device for City buyers, state contracts can also serve as another device to limit the participation of M/WBE businesses, even when those businesses provide goods at competitive prices and comparable quality levels. At the same time, M/WBE vendors are identified as such on state contracts and thus, as with piggybacked contracts, state contracts can in some instances facilitate the utilization of SBEs and M/WBEs.

In practice, the City has used state contracts primarily for the purchase of microcomputers and network hardware and software.³¹ The City also uses state contract prices as a starting point in developing solicitations and negotiations.

3.3.10 Emergency Procurement

As noted earlier, emergency procurement is exempt from state competitive bidding rules.³² North Carolina state procurement law defines emergency as a present, immediate, and existing condition involving the health and safety of people and property. The City *Policy and Procedures Manual* requires that emergency procurement involve harm that cannot be averted through temporary measures and cannot be self-created. North Carolina procurement case law has interpreted the statutory requirements for

³⁰ NC GS § 143-129(e)(9).

³¹ City Council Resolutions in 1996 for microcomputers and 1997 for network hardware and software.

³² NC GS § 143-129(a).

emergency procurement narrowly.³³ Emergency procurement was not reported as a vehicle for evading the standard procurement rules.

3.4 Services

3.4.1 Services Generally

North Carolina state procurement law provides very few constraints on the purchase of services. The Charlotte *Policy and Procedures Manual* provides that RFPs should be solicited from an “adequate number of qualified sources.”

In practice, the City has used RFPs and competitive negotiations in the procurement of services. A review of Charlotte procurement of professional services suggested, “There was evidence that in certain KBUs there is a certain comfort zone in using the same firms over and over again.”³⁴ Evidence for this claim is explored in the utilization chapter below.

3.4.2 Competitive Sealed Proposals

Competitive sealed proposals have the following legal requirements for contracts subject to state competitive bidding requirements:

- Competitive sealed proposals must be publicly advertised.
- Competitive sealed proposals must be submitted as sealed bids.
- No negotiations are permitted for competitive sealed proposals unless all the bids exceed the funds available for the project.³⁵ The City is permitted to negotiate the award of RFPs that are used for contracts not subject to competitive bidding requirements, such as service contracts.

In general the preparation of proposals in response to RFPs can be burdensome for newer, smaller firms. In staff interviews the MWBD office indicated that it had asked

³³ See, e.g., *Raynor v. Louisburg*, 220 NC 348 (1941).

³⁴ Franklin Lee, *The City of Charlotte: A Review of Current City Contracting and Procurement Practices with Recommendations for Enhancing Small Business Participation*, November 19, 2002, at 8.

³⁵ NC GS § 143-129(b).

for postmortem assessments on awards of competitive sealed proposals in order to assist M/WBEs in identifying weaknesses in their response to RFPs. The MWBD office reported that departmental assistance on postaward review has been uneven.

3.4.3 Selection of Architects, Engineers, Surveyors

State law requires that plans and specifications for the construction or repair of public buildings be prepared by registered architects or engineers when the expenditure of public funds will be in excess of the threshold amounts set forth in NC GS § 133.1.1. Those amounts are \$300,000 for repair of public buildings that does not include major structural changes in framing or foundation support systems; \$100,000 for repair of public buildings affecting life safety systems; \$135,000 for repair of public buildings that includes major structural change in framing or foundation support systems; and \$135,000 for construction of or additions to public buildings. When architectural, engineering, surveying, or construction management at-risk services (AES services) are required by the City, the City's Engineering & Property Management (E&PM) Department is responsible for the selection process and subsequent management of those contracts. North Carolina law requires local units of government to use a "qualification based" selection procedure in which the City announces requirements for AES services, selects firms based on demonstrated competence and qualifications without regard to fee, and negotiates a fair and reasonable fee.³⁶

3.5 Construction Contracting

A number of changes were made to the rules governing public construction contracts in SB 914 that took effect in 2002. Construction contracts are awarded based on either a formal bid process or an informal bid process. Prior to SB 914, any

³⁶ NC GS § 143-64.31-34.

construction contract involving the estimated expenditure of \$100,000 or more of public funds had to comply with the requirements for formal bidding. SB 914 increased this threshold to \$300,000 or more. Pursuant to federal transit rules, CATS uses formal awards for federally funded construction contracts in excess of \$100,000.³⁷

3.5.1 Formal Bids for Construction

The legal requirements for formal construction contracts include: public advertising of plans and specifications, a 5 percent bid bond, public opening of the bids, a minimum of three bids, 100 percent performance and payment bonds (for contracts in excess of \$50,000— the \$50,000 are subcategories or branches of work specifically for building projects on contracts in excess of \$300,000),³⁸ a written contract awarded by the City Council at a regularly scheduled meeting, and a minority business requirement (discussed below). Construction contracts let under the formal bid process require separate specifications for mechanical (HVAC), plumbing, electrical, and general contracting.

Prior to the adoption of SB 914 in 2002, North Carolina law allowed for three types of competitive bidding methods for building projects:

- **Separate Prime Bids (Multiprime bidding).** All prime categories (mechanical (HVAC), plumbing, electrical, and general contracting) bid separately and directly to the public agency for each of the four categories.³⁹
- **Dual Bids.** Separate and single prime bids could be accepted and the agency could award to the lowest responsible bidder.
- **Alternate Contracting Methods.**⁴⁰ The State Building Commission could approve other methods of contracting given proper justification. This could include single prime bids, construction management, and design-build.

³⁷ FTA Circular 4220.1D.

³⁸ Prior to SB 914 payment and performance bonds were required on contracts of \$15,000 or more for projects of \$100,000 or more.

³⁹ NC GS § 143-128(b).

⁴⁰ NC GS § 143—135.26(9).

The City has generally preferred single prime contracts because of ease, from a project management standpoint, of scheduling and reduction in conflicts between prime contracts. Some observers suggest that the multiple prime bidding is more conducive to M/WBE utilization as prime contractors. Interviews with engineering and MWBD Office staff suggest that these different methods do not have a significant impact on M/WBE utilization if adequate M/WBE goals are set, monitored, and enforced.

3.5.2 Senate Bill 914: Recent Change in State Laws Governing Public Construction

North Carolina recently made significant changes to its state laws governing public construction contracts in what is now commonly referred to as SB 914. Some of the principal changes included in this bill were as follows:

- raising the threshold to \$300,000 for formal bids;
- revising the competitive bid methods—Construction Management At Risk, Single Primes, and a modified Dual Bidding to the delivery of public construction projects
 - Under Construction Management At Risk the construction manager, a licensed general contractor, provides construction management and guarantees the cost of the project (“Guaranteed Maximum Price”).⁴¹ Design is contracted for separately. The construction manager publicly advertises for, selects, and contracts with the “first tier” subcontractors directly. The key advantage of this technique is the involvement by the contractor during the design phase of the project. (This method required approval by the State Building Commission prior to SB 914.)
 - Under Single Prime Bids there is one prime contractor for all four areas (plumbing, mechanical, electrical, and general contracting) with the prime identifying the subcontractors.⁴² (SB 914 allows this method without having also to bid separate prime.)
 - Under the modified Dual Bidding system the City can choose either the lowest responsible single prime bid or the lowest responsible set of separate prime bids⁴³ and (Dual bidding was allowed prior to SB 914 and remains unchanged. Award goes to the lowest responsible bidder whether it is from the single prime bids or separate prime bids); and
- changing M/WBE utilization requirements (discussed below).

⁴¹ NC GS § 143-64.31.

⁴² NC GS § 143-128(a1).

⁴³ NC GS § 143-128(d1).

SB 914 and M/WBE Utilization Requirements

Since 1989, the state has set a 10 percent utilization goal for minority businesses on North Carolina state building projects and required local governments to develop their own minority business goals.⁴⁴ SB 914 made changes to minority business utilization requirements. The principal changes are:

- **Definition of Minority:** SB 914 changed the definition of minority to include socially and economically disadvantaged individuals as defined in the federal rules.⁴⁵
- **Goals.** The new legislation places a 10 percent goal on all state projects and a 10 percent goal on all local projects of \$100,000 or more that use state funds for the project, unless the local unit has a different “justifiable” goal adopted before December 1, 2001.⁴⁶ Agencies must use an “appropriate verifiable” goal. Thus, the goal must be based on a disparity study or other method that considers availability and utilization of M/WBEs. The goal can be implemented only after notice and public hearing.
- **Good Faith Efforts.** Bidders must undertake good faith efforts to meet M/WBE utilization goals as specified by the statute.⁴⁷ Good faith efforts include: contacting M/WBEs, making plans and specifications available at least 10 days prior to bid date, breaking down work into feasible elements to facilitate M/WBE participation, attending pre-bid conferences, working with M/WBE contractor organizations, providing assistance in bonding or insurance, negotiating in good faith, providing assistance in terms of lines of credit and providing assistance in obtaining the same unit pricing from the bidders suppliers, negotiating joint venture and partnership agreements, and providing quick pay agreements. Local governments can add additional good faith requirements. Less specific requirements for minority outreach apply to the selection of architects, engineers and surveyors,⁴⁸ and informal building projects.⁴⁹
- **Limits on replacing subcontractors.** The new rules limit the ability of contractors to hire a minority firm to win a contract and then drop the firm after the contract is awarded.⁵⁰

⁴⁴ NC GS § 143-128.

⁴⁵ NC GS § 143-128.2(g); 15 USC 637.

⁴⁶ NC GS § 143-128.2(a).

⁴⁷ NC GS § 143-128.2(f).

⁴⁸ NC GS § 143-64.31(a).

⁴⁹ NC GS § 143-131(b).

⁵⁰ NC GS § 143-128.2(d).

At present, these minority business utilization requirements are not that significant for the City of Charlotte because the City does not have a verifiable goal and because the City does not receive a significant amount of state funds for construction projects. The Charlotte MWBD program was challenged in court (see discussion in Section 3.8.1 below) and the City is prohibited from adopting M/WBE goals absent a disparity study pursuant to court order in 2002.

3.5.3 Informal Construction Bids

State law allows an Informal bidding process for public construction projects estimated to cost between \$5,000 and \$300,000.⁵¹ Rather than mandating the use of a particular process, state law simply requires that the contract be awarded to the “lowest responsible bidder,” taking into consideration quality, performance, and the time specified for the performance of the contract. Payment and performance bonds are not required for informal contracts, although the City may determine if there is a need for such bonds on a case-by-case basis.⁵² SB 914 added minority business utilization good faith requirements (solicitation of minority firms, documentation of minority outreach efforts, and reporting to the State Historically Underutilized Business Office) to informal building construction contracts.⁵³

3.6 General Purchasing Provisions

3.6.1 Bonding

As noted above, construction and repair contracts of \$300,000 or more require performance and payment bonds. For formal contracts where the different branches of work (plumbing, electrical, general contractor, or HVAC) are in excess of \$50,000,

⁵¹ NC GS § 143-131.

⁵² NC GS § 143-131.

⁵³ NC GS § 143-131(b).

performance and payment bonds are required.⁵⁴ These bonds cannot be waived. Bonds for supply and service contracts are not legally required.

Staff interviews in general did not raise bonding as a major obstacle to M/WBE utilization. Staff did report some instances (in Engineering and CMUD) of waiving bonds to facilitate M/WBE utilization where bonds were not legally required by state statute and there were M/WBE prime contractors.

3.6.2 Bidder Negotiation

As noted above, negotiation for contracts subject to formal bidding requirements under the North Carolina bid statute is permitted only when all bids exceed available funds for the project. In such instances the City can negotiate with the lowest responsible bidder. The City is permitted to make reasonable changes to the scope under those conditions. The City is also authorized to negotiate with bidders on technology and service contracts.⁵⁵

Competitive negotiated procurement is a procedure that concludes with awarding a contract to the offeror whose offer is most advantageous to the government. CATS uses competitive negotiated procurement for transit equipment, vehicles and supplies with RFPS negotiated over specifications, prices, and other terms and conditions to achieve the best value for the City.⁵⁶ The use of competitive negotiated procurement by CATS is subject to City Council approval.

3.6.3 Specifications

Narrowly restrictive specifications, and/or the use of brand names, can serve to restrict competition and limit the participation of M/WBE businesses. North Carolina state law provides that in general bid specifications should provide for broad

⁵⁴ NC GS § 44A-26.

⁵⁵ NC GS § 143-129.9.

⁵⁶ CATS, Procurement Policies, Section 2.1.C; Code of the City of Charlotte 8.87; NC GS § 143-129(h).

competition.⁵⁷ In addition, the Charlotte *Policy and Procedures Manual* provides that the Procurement Services Division should work with KBUs to refine specifications.⁵⁸ The *Policy and Procedures Manual* also provides that “brand names or equal” should be specified only in the absence of a satisfactory alternative.⁵⁹

Staff interviews indicated that there had been occasional vendor complaints about specifications in the past. The Procurement Services staff indicated that they generally avoid the use of brand names in developing specifications; however, they acknowledged that on occasion KBUs have demonstrated a preference for particular brand name specifications. Staff also indicated that the City almost always holds pre-bid conferences before formal bids where concerns about specifications can be discussed.

3.6.4 Vendors

Vendor Sourcing

In principle, the City sources vendors through the Vendor Application Form, references, the local telephone book, Thomas Register, and the Internet. Nevertheless, vendor management has been a source of concern for both M/WBEs and Procurement Services. Until recently Charlotte did not have a vendor management system with adequate procurement functionality. Procurement Services could not regularly pull vendors by commodity code out of the system unless the vendor had already done business with the City. There has been no electronic notification of vendors most likely to respond to solicitations (for example, by commodity or service code). The absence of such a system leads to a bias towards incumbent vendors, as buyers unduly rely on lists of their own construction. Procurement Services did, however, direct vendors to the State purchasing site where many City solicitations are posted. The City also notifies

⁵⁷ *Sperry v Patterson*, 73 NC App 123 (1985).

⁵⁸ *Policy and Procedures Manual*, at 11.

⁵⁹ *Policy and Procedures Manual*, at 11.

SBEs of bid opportunities electronically through its SBE newsletter, and M/WBEs through its MWBD newsletter.

Charlotte is currently in the middle of implementing a new vendor management system. This system allows vendor searches by name, number, and commodity code. The new system also has fields for certifications, owner data, demographic data, and licenses. The system allows for bid notification to vendors based on the goods and services provided by vendors. Vendors can bid but cannot be awarded a contract without being registered in the new system. The projected rollout of the new vendor management system is July 2003.

Vendor Relations

One concern that was expressed in staff interviews is the feeling that some City inspectors effectively limit M/WBE participation through inspections. The City has a more demanding inspection process than some other local public agencies that rely primarily on the architect for compliance with relevant construction standards. Concern was expressed in telephone surveys, on-line surveys (see Anecdotal Chapter below), and in one staff interview that although there was no formal "watch list," the City inspections process was unduly subjective and had a disparate impact on M/WBE construction firms, effectively debaring them in some instances from future City contracts.

Prompt Payment

Staff interviews indicated that prompt payment of vendors has been an issue with vendors over the study period. North Carolina law requires subcontractors to be paid within seven days of payment of the prime contractors. Subcontractors can charge a 1 percent fee a month for delays beyond that.⁶⁰ Under the new SBE policy, prime

⁶⁰ NC GS § 143-134.1(b).

contractors will submit partial payment affidavits signed by subcontractors as a condition of being paid by the City.

3.6.5 Contract Bundling

The bundling of smaller contracts into larger contracts raises certain dilemmas for purchasing staff in general. On the one hand, monitoring and inconsistent service across multiple vendors is a problem with breaking up contracts into smaller units (contract sizing). On the other hand, contract bundling can limit the utilization of M/WBEs and small businesses.⁶¹ For example, it may be difficult for SBEs and M/WBEs to bid on parking lots, but SBEs and M/WBEs can bid on snow removal, fencing repair, cleaning, and line painting. Similarly, many SBEs and M/WBEs may be in the position to bid on contracts for one facility, but may not be in the position to bid on a contract covering all Charlotte facilities. And many SBE and M/WBE prime contractors are relegated to subcontractor status when contracts are bundled.

Charlotte has experienced some contract bundling in the areas of sidewalks, landscaping, and in refuse contracts in the Solid Waste KBU that have affected M/WBE utilization. Chapter 6.0 below reports City spending with M/WBEs by contract size.

3.7 Purchasing Systems

3.7.1 Computer System

All Charlotte purchase order and purchase requisitions are processed through the GEAC system. The purchasing process is generally begun with requisitions posted on GEAC. The GEAC system has a number of limitations that have been identified by the Procurement Services Division. As noted above, the integration of vendor management

⁶¹ For example, a study of federal contracting found that for every 100 bundled contracts, 106 contracts were lost to small businesses; and for every \$100 awarded under a bundled contract, small businesses lost \$33 in revenue. Jason Miller, "How OMB Will Limit Contract Bundling," *Government Contracting News*, October 30, 2002.

systems with the rest of procurement has been a problem that the City is now rectifying. GEAC has not provided a uniform system of tracking expenditures. The City can track who got paid through its Accounts Payment system in Finance, but cannot adequately track what the City was spending its money on. Moreover, subcontractor payments are not tracked through the system. In general there is an absence of a complete contract file that would permit a complete profile of contracting activities. The Procurement Services Division acknowledges that inability to capture and analyze data in the GEAC system contributes to KBUs engaging in purchasing behavior inconsistent with best practices and with the existing purchasing regulations.⁶² MGT staff interviews and MGT's review of Charlotte data systems are consistent with this evaluation of GEAC by the Procurement Services Division.

3.7.2 E-Procurement

The State of North Carolina is in the process of moving towards Internet-based procurement. The new e-procurement system will include state agencies, local educational authorities, universities and community colleges, and local governments. The North Carolina e-procurement system performs vendor registration, requisitions, notification of suppliers, payment initiation, and updating records electronically. The state projects purchasing all goods through the e-procurement system. Suppliers are currently responsible for a 1.75 percent marketing fee per purchase order.

The City is in the middle of studying e-procurement generally, and its relationship to the state Internet-based system in particular. The City has used the State Interactive Purchasing System for posting bids, developed a procurement information Web page on the Charlotte City Web site, and used an Internet On-line catalog for office supplies,

⁶² Business Support Services, *Technology Request Planning Worksheet, FY 2004 2005.*

maintenance, repair and operation supplies, and laser and ink cartridges. The City has not moved forward on the on-line solicitation of bids.

3.7.3 Insurance

Insurance requirements, like bonding requirements, are a necessary component of contractual relationships that serve both parties. The utilization of M/WBEs can be assisted by certain programs that enable these businesses to achieve required levels of coverage. One such program is an Owner-Controlled Insurance Program (OCIP). The use of an OCIP can occur when a construction project cost surpasses a threshold in excess of \$150 to \$200 million. Also called a wrap-up, such an insurance program enables the owner—the City, as an example—to consolidate various insurance coverages into a program that brings all the contractors and subcontractors into the controlled program. The underutilized businesses may, in such a program, be able to achieve coverages they could not achieve on their own. In general, depending on market conditions and the success of a project, OCIPs can reduce an owner's project costs by an average of 1 to 2 percent, compared to traditional, fragmented insurance programs. The City does not presently have an active OCIP.

3.8 Remedial Programs

3.8.1 Historical background

Charlotte first established an MWBD program in 1981. The first Charlotte MWBD program authorized by the North Carolina General Assembly was limited to federally funded projects. In October 1981 the Charlotte City Council adopted an MWDB plan allowing the City to consider bidder efforts to include M/WBE participation to the extent permitted by State law. The 1981 MWBD program allowed for the rejection of bids where goals were not met and there was no showing by the bidder of reasonable efforts

to meet the M/WBE goal. The City temporarily suspended the MWBD program in March 1982 based on the North Carolina attorney general opinion that the Charlotte MWBD program violated State public bidding laws. In October 1983 the City adopted a Good Faith Efforts plan and relied on evidence from a 1983 study M/WBE participation in City contracting produced by the Urban Institute. Minor changes were made to the MWBD program in 1985. In 1987 the North Carolina General Assembly ratified another bill allowing Charlotte to establish an MWBD program.⁶³ The November 1987 plan required bidders to make good faith efforts prior to the bid. Contract-specific utilization goals were adopted. The statute did not provide for bid preferences or set-asides. Contractors were not required to subcontract work.

In 1991, the MWBD program was modified following the *Croson* decision. Certain minorities were excluded from the program based on results from the 1983 Urban Institute study. Charlotte, along with the County and Charlotte Mecklenburg Schools conducted a disparity study in 1993.⁶⁴ The 1993 disparity study generally found disparity for construction, professional services, and goods and services for all MWBD groups.⁶⁵

The Charlotte MWBD program was ended in early 2002 as part of the settlement of a lawsuit filed by United Construction Company of Charlotte (“United”). United, a former certified M/WBE, was denied a contract for a City road project in Charlotte for failure to comply with the MWBD program good faith efforts requirements. The City awarded the \$2.5 million contract to another bidder that satisfied M/WBE good faith effort requirements by awarding a subcontract to M/WBEs. The MWBD program had been scheduled to sunset on December 31, 2002.

⁶³ Senate Bill 290, Chapter 344 June 1987.

⁶⁴ D.J. Miller & Associates, *City of Charlotte MWBD Disparity Study*, October 1993.

⁶⁵ Disparity for Asian owned firms was not always statistically significant.

3.8.2 MWBD Program, 1991–2002

The MWBD program objectives were to promote the growth of M/WBEs; to increase the utilization of small, female, and minority businesses; to promote equal opportunity; to comply with federal requirements for utilization of female and minority businesses; and to monitor and report contract utilization for M/WBEs. Prior to its 2002 termination, the MWBD program was a flexible goals program. There were no bid preferences or set-asides, neither of which is allowed under North Carolina law. In general, the program set only project goals and not overall goals for the City or individual KBUs.

3.8.3 MWBD Office

The MWBD office was part of the Business Support Services Division. City and County procurement are integrated, but the City and County MWBD programs were never integrated. However, the County has accepted Charlotte M/WBE certification. Although the City still performs M/WBE tracking and race neutral outreach, the MWBD office no longer exists. As of early 2003 the Small Business Development Program (SBDP) manages the new Small Business Opportunity Program, discussed below.

The MWBD office issued quarterly and annual reports, oversaw M/WBE certification, and conducted outreach. The MWBD office also maintained customer files, capacity information business profiles, and source lists. Contract compliance in terms of monitoring daily subcontractor use was conducted by the respective KBU handling the contract. This included monitoring change orders, M/WBE payments, retainage held on M/WBE subcontractors, M/WBE and prime contractor evaluation forms, and fulfillment of the contract's M/WBE utilization commitment. The MWBD office staff did not in general sit in on selection committees.

The MWBD office had a staff of two, plus two temporary workers. In addition, CMUD and Engineering and Property Management Department had their own M/WBE coordinators.

3.8.4 Goal Setting

The MWBD program set project specific goals on contracts subject to formal bid requirements greater than or equal to \$100,000. Informal contracts and construction contracts less than \$100,000 did not require goals. Goals were established in collaboration between KBU executives and the MWBD director. Contracts awarded to M/WBE firms were subject to the same requirements as other firms. There were no M/WBE goals set if the vendor did not intend to subcontract work. The Charlotte MWBD program accepted evidence of good faith efforts of vendors that failed to meet the goal.

Goals for each M/WBE group were based on firm availability. Staff interviews and reviews of selected goal-setting documents indicate that project goals were often 3 to 5 percent for African American-owned firms, and 3 to 5 percent for women-owned firms. Projects goals were rarely above 20 percent.

3.8.5 Certification

Charlotte certified (and continues to certify) firms as M/WBEs if there was 51 percent minority or woman ownership and control of the day-to-day operations. A business license is required for certification. Firm capacity (as measured by average revenue over three years, bonding, licensing, number of employees, and equipment) was reviewed at the time of certification.

During the study period, certification was valid for one year. Certification could be revoked for changes in ownership, delegation of contracts, cessation of business operations, false or misleading information, history of poor performance, incomplete contract performance, or failure to submit an application for certification renewal. If

certification was denied there were three levels of appeal. Charlotte did engage in occasional site visits to enforce these rules. There were no graduation provisions for Charlotte M/WBE certification.

The certification process had been managed by a certification committee composed of City staff and Key Businesses. The City Privatization/Competition Advisory Committee suggested contracting out certification. Certification was first contracted out to Liz Mills Ltd, Inc. The certification was later let out to Contract Compliance, Inc. (CCI) from October 2000 to January 2003. Liz Mills Ltd. and CCI also made some sites visits. In the calendar year 2001, CCI certified 642 firms, 314 of which were recertifications. Of the 653 total certification applications, 11 were denied.⁶⁶

Charlotte did not participate in unified certification per se. But other local agencies with M/WBE programs—in particular, the County and Charlotte Mecklenburg Schools—have accepted City M/WBE certification.

3.8.6 Pre-Bid Activity

Some information on procurement forecasts was communicated to the MWBD office and to M/WBEs. CMUD gives its Construction Improvement Program (CIP) plan to the MWBD office, which placed procurement forecasts in its newsletter.

The Charlotte MWBD program required that KBUs review formal projects for M/WBE opportunities, and where possible to package those projects to facilitate M/WBE participation. For informal bids, the Charlotte program suggested the solicitation of at least three M/WBEs. KBUs were also instructed to keep an M/WBE source list based on anticipated subcontract opportunities.

KBUs were instructed to notify the MWBD office when an RFQ was being developed and to discuss the opportunities for M/WBE participation. KBUs were also

⁶⁶ CCI, City of Charlotte *MWBD Program Certification 2001 Annual Report*.

instructed to prepare a MWBD source list for inclusion in the RFQ and to prepare a summary report of M/WBE participation from the Statements of Qualification submitted by interested firms. M/WBE participation was part of the contract negotiations in the RFQ process.

In interviews with KBUs, staff gave varying results on the clarity of the MWBD program and its promotion. Some KBU staff indicated that promotion of the MWBD program was limited and that the source lists for M/WBEs were outdated. Other KBUs did have dedicated staff working on M/WBE utilization. Some KBU staff felt that the interpretation of good faith efforts was on occasion subjective and inconsistent.

3.8.7 DBE Program

The City Aviation department runs the federally mandated Disadvantaged Business Enterprise (DBE) program for the Charlotte-Douglas International airport. The DBE program currently has a goal of 17.1 percent.⁶⁷ This goal translates into \$326,880 in current spending with DBEs. The program currently envisions achieving this goal entirely through race-neutral means. The primary race neutral means for achieving the DBE goal are requiring prime solicitation of DBEs, disseminating information on contracting opportunities and procedures, providing technical assistance, and distributing the DBE directory. The program does not use race-neutral set-asides.

Services available through Charlotte-Douglas International's Airport's DBE Program include:

- DBE Certification
- DBE Directory
- Notices of Airport Contract Solicitations
- Proposal Writing Workshops and Training Seminars
- Pre-Bid Conferences
- Joint-Venture and Partnership Arrangements

⁶⁷ FY 2002 Disadvantaged Business Enterprise (DBE) Methodology for Charlotte Douglas International Airport, at 1.

- Access to Plan Room
- Monthly Contract Opportunity Newsletters

CATS also runs a DBE program. The CATS DBE goal for FY 2002 was 15.6 percent.⁶⁸ The program has sought to achieve 6 percent DBE participation through race-neutral means. The CATS DBE program certifies DBEs, monitors federally funded projects, maintains a DBE directory, and conducts outreach to DBEs.

The Charlotte DBE program and CATS are both participating in unified DBE certification. The Unified Certification Plan has been partially implemented in North Carolina in the form of the completion of a unified certification application. The North Carolina Department of Transportation is leading the unified certification efforts in North Carolina.

3.9 Race- and Gender-Neutral Programs

3.9.1 Small Business Opportunity Program

Following the cessation of the MWBD program in early 2002, the City established an MWBD Stakeholder Committee. The Stakeholder Committee issued Interim Program Recommendations in June 2002. The Stakeholder Committee recommendations included:

- establishing an SBE outreach plan;
- increasing access of SBEs to informal contract opportunities (purchases of apparatus, equipment, materials, or supplies of more than \$5,000 but less than \$100,000) with the City;
- setting up a Small Business Center;
- starting a Web-based virtual business incubator;
- passing a commercial nondiscrimination ordinance;
- maintaining a small business loan program; and
- providing education and training initiatives.

⁶⁸ CATS initially adopted the 17.1 percent DBE goal from the Charlotte/Douglas International Airport

After City review of these recommendations the City adopted a Small Business Opportunity Program on January 27, 2003. The new SBO program adopted the seven principal components of the Stakeholder Committee Interim Program Recommendations. CATS, CMUD, and Aviation will follow the City's SBE programs. The Aviation program has no plans for an SBE program at the present time for federally funded projects.

The proposed City SBO program is a goals program and does not envision set-asides or bid preferences at the present time.⁶⁹ The SBO Program Manager will recommend SBO goals on informal contracts for each KBU at the beginning of each business planning cycle. The Program Manager will also assist in developing SBE project goals on formal contracts.

The program allows for bidder good faith efforts to achieve the goals on formal contracts (purchases of apparatus, equipment, materials, or supplies of \$100,000 or more secured through competitive sealed bids), including contacting SBEs at least 10 days prior to bid date; negotiating in good faith with SBEs; notifying the City of subcontracting opportunities for SBEs, attending City SBO meeting; making construction plans available to SBEs; breaking down projects to facilitate SBE participation; attending pre-bid meetings; working with trade associations; assisting SBES with bonding and insurance; negotiating joint ventures with SBEs; assisting SBEs with credit and loans; and prompt payment policies with SBEs. Self-performance of contractual obligations does not exempt bidders from good faith efforts.

The SBO program also contains provisions governing mandatory outreach to SBEs, mandatory subcontracting, and the replacement of subcontractors. Mandatory

⁶⁹ Charlotte does not have any preferences for local business or businesses located in distressed areas (HUBZones). Such preferences are not provided for in the North Carolina state procurement statute. However, the City can send notices only to local bidders.

subcontracting is to be considered in instances where it is practical given industry experience and can result in realistic SBE subcontracting opportunities.

Certified SBEs must be located in the Charlotte Metropolitan Statistical Area. The program uses 25 percent of the Small Business Administration (SBA) size standard as the Charlotte SBE size standard.⁷⁰ SBE certification also requires a \$750,000 personal net worth limitation (with exclusions for home equity, business equity, and retirement savings), and eligible owners must own at least 51 percent of the interest in the business. SBE certification is valid for three years, and will not be required for bidding or contract award. SBE certification will be a guideline for receiving small business assistance from the City, which could be required by the City Council for specific contracts on a case-by-case basis.

3.9.2 Commercial Nondiscrimination Business Policy

On September 23, 2003, the Charlotte City Council adopted a Commercial Non-Discrimination Ordinance, with the stipulation that it not go into effect until state legislative approval is obtained for two components of the ordinance (the definition of “discrimination” and the right to disqualify firms from bidding on or participating in City contracts). While the City has attempted to procure state approval, the requested legislation was not enacted during the North Carolina General Assembly’s most recent session. The City did start using nondiscrimination language in its contracts in March 2002.

The new policy aims to deter discrimination against vendors, subcontractors, suppliers, and commercial customers on the basis of race, gender, religion, national origin, ethnicity, age, or disability. Discrimination covers the “solicitation, selection, hiring or treatment of vendors, suppliers, subcontractors, or commercial customers.” The

⁷⁰ Denver, Cincinnati, and Milwaukee also use percent of SBA as their size standard. The North Carolina DOT DBE program uses a \$1.2 million in sales size limit.

policy will apply only to firms that supply goods or services on City contracts. The proposed remedies in the commercial nondiscrimination policy include finding that the bidder is not a “responsible bidder,” termination of the current contract, and disqualification from bidding on future City projects.

3.9.3 Business Development Programs

Financial Assistance

Historically, the City has not established financial assistance programs for City vendors. The Neighborhood Development KBU does provide an Equity Loan program that targets retail and service business for low-wealth individuals in economically distressed areas, labeled Communities-Within-A-City. The City provides up to 20 percent of the loan funds, and the rest of the loan funds are supplied by bank loans using standard underwriting criteria.

The City established, as a component of its Small Business Development Program, a Small Business Loan Enterprise Fund in conjunction with a consortium of local banks to provide working capital and lines of credit. The City is proposing to revise its current Equity Loan program in line with its new objectives.

The City does not provide bonding assistance to contractors. There is not a bonding component in the new Small Business Development Program. However, bonding assistance is part of good faith efforts in the SBO program. As another race-neutral effort, the City also adopted a resolution waiving performance bonds on purchase (but not construction) contracts. Technical assistance with bonding applications is, however, available from The Bond Exchange and the Bond Network.

Management and Technical Assistance

Charlotte does not conduct a substantial business development services itself at the present time. The City attempted to put on a Contractors College but was unable to

assemble the necessary resources. Charlotte has not maintained a mentor-protégé program. The MWBD program put on training seminars on preparing bid documents, publishing a list of all training opportunities, conducting business fairs, consulting with local private sector agencies, and maintaining a referral system. The City has assembled and distributed a *Business Resource Directory* of local business development programs.

The Small Business Development Program does envision a number of management and technical assistance efforts, including:

- Small Business Information Center. A clearinghouse of information and technical assistance.
- Virtual Business Incubator. A Web site for access to business resources.
- Training and Continuing education initiatives. This will include a sponsorship program for small business training.

There are a number of business development programs in the Charlotte area, some of which partner with the City. Central Piedmont Community College provides a Small Business Center, which provides a Business and Entrepreneurial Skills Training Program (BEST) in conjunction with the City of Charlotte and First Citizens Bank. The BEST program is a nine-month program that provides on-site consulting, workshops, and mentoring. The National Association of Women Business Owners, the SBAs SCORE program, and the Kenan Institute also provided seminars and classes for small business owners.

Minority Contractors Resource Center (MCRC) is currently being established by the Metrolina Minority Contractors Association (MMCA), the North Carolina Institute of Minority Economic Development, Bank of America, and McDevitt Street Bovis. The MCRC will provide a clearinghouse for construction opportunities; leased office space for small construction related firms; a plan room; pre-bid and post-bid managerial and technical assistance; and a training center that will conduct workshops.

Other business development programs include:

- The Charlotte Minority Business Development Center provides one-on-one full service consulting on loan packages, management, procurement and related areas.
- The SBDTC houses a branch of the Procurement Technical Assistance Center. PTAC, however, focuses on assisting contractors with federal and state procurement opportunities.

Outreach

The Charlotte MWBD program had specific outreach objectives, which included:

- identification of firms;
- identification of where M/WBE utilization is low;
- identification of where training is needed;
- communication of information;
- provision of advocacy; and
- coordination of programs.

MWBD office annual reports indicated a number of activities undertaken as part of outreach, including:

- posting the M/WBE vendor list on the Charlotte Web site;
- posting contract opportunities on the M/WBE (now SBE) section of the Charlotte Web site;
- putting on workshops on certification and how to do business with the City (typically 3-4 workshops a year);
- providing individual notification of firm opportunities via postcards, e-mail, phone calls and fax to firms; and
- contracting with Liz Mills Ltd. to put on workshops entitled, "Purchasing with Inclusion."

The MWBD office did collaborate with an outside organization on outreach programs for small and M/WBE businesses. The Charlotte Chamber of Commerce has put on procurement conferences with several thousand participants that serve as an outreach vehicle of M/WBEs with private and public procurement opportunities. The Charlotte Chamber also maintains a small business office, a diversity council, and a Small Business Information Center.

KBU M/WBE outreach has been uneven. Certain KBUs, such as Engineering and Property Management, and CMUD have their own M/WBE coordinators and own vendor lists. CATS and Aviation did hire an outside consultant, Ken Weeden & Associates, to assist with DBE outreach. Other KBUs exhibited limited M/WBE outreach activities.

During the suspension period the City has engaged in several race- and gender-neutral outreach activities. These included, but are not limited to:

- two to three month contract forecasts;
- conducting business fairs;
- participating in business fairs; and
- maintaining a referral system for technical assistance.

Findings and recommendations related to contracting policies, procedures, and programs are included in Chapter 8.0 Findings and Recommendations.

**4.0 RELEVANT MARKET AREA,
UTILIZATION, AND AVAILABILITY
ANALYSES**

4.0 RELEVANT MARKET AREA, UTILIZATION, AND AVAILABILITY ANALYSES

MGT's study for the City of Charlotte documents and analyzes the participation of minority, women, and nonminority businesses in the City's procurements for five calendar years beginning on January 1, 1998, through December 31, 2002. This chapter describes the City's relevant market areas and analyzes the utilization and availability of minority, women, and nonminority firms. The results of the analyses ultimately determine whether minority, women, or nonminority businesses were underutilized or overutilized in these procurements.

This chapter consists of the following sections:

- 4.1 Methodology Overview
- 4.2 Construction Contracts Less Than \$30,000
- 4.3 Construction Contracts Greater Than \$30,000
- 4.4 Architecture and Engineering
- 4.5 Professional Services
- 4.6 Other Services
- 4.7 Goods and Supplies
- 4.8 Conclusions

4.1 Methodology Overview

This section presents an overview of the methodology for the collection of data and analysis of market areas, utilization, and availability of minority-, women-, and nonminority-owned firms. Methodology specific to each business category is further explained within each of those sections. The descriptions of business categories and minority- and women-owned business enterprise (M/WBE) classifications are also presented in this section, as well as the process used to determine the geographical market areas, utilization, and availability of firms.

In addition, specific methodology related to each business category is explained in that business category section.

4.1.1 Business Categories

Five business categories were used to delineate the City's relevant market areas and the utilization of M/WBE and nonminority firms:

- construction;
- architecture and engineering;
- professional services;
- other services; and
- goods and supplies.

These categories were classified based on the account codes and descriptions used by the City's GEAC system. Each vendor payment was grouped into one of the above categories based on the account code descriptions, which were verified by appropriate City employees familiar with the accounting system. A listing of account codes, description, and their classification are shown in **Appendix B**. The definitions used to group the contracts and payments are as follows.

Construction: Any construction-related services, including, but not limited to:

- Heavy construction other than building construction
 - Highway and street construction
 - Heavy construction
- Building Construction (General Contractors and Operative Builders)
 - General Building Contractors – Nonresidential
- Construction-Special Trade Contractors
 - Plumbing, heating, and air conditioning
 - Painting and paper hanging
 - Electrical work
 - Masonary, stonework, tile setting and plastering
 - Carpentry and floor work
 - Roofing, siding, and sheet metal work
 - Concrete work
 - Miscellaneous special trade contractors

Architecture and Engineering Services: Any architecture or engineering services, including all firms in architectural design and engineering services, and all

environmental consulting. There were two account codes that captured architectural and engineering services – Architecture and Engineering (0031820) and Professional and Technical Services (0031700).

Also included within this category:

- Inspections
- Soil testing
- Surveying
- Materials testing

Professional Services: Any services provided by a person or firm that are of a professional nature and require special licensing, educational degrees, and/or unusually high specialized expertise, including:

- Accounting and financial services
- Advertising services
- Laboratory testing services
- Legal services
- Management consulting services
- Professional and technical services
- Technical services
- Training

Other Services: Any service that is labor intensive and not professional or construction related, including, but not limited to:

- Equipment Rental
- Janitorial and maintenance services
- Landfill services
- Laundry and dry cleaning
- Maintenance and repairs
- Printing
- Real property
- Security services
- Special department supplies
- Subsidy, care and support
- Technical services
- Telecommunications
- Temporary help

Goods and Supplies: Equipment and consumable items purchased in bulk, or a deliverable product including, but not limited to:

- Automobiles and equipment
- Chemicals and laboratory supplies
- Construction materials and supplies
- Equipment parts and supplies
- Fuels and lubricants
- Janitorial and cleaning supplies
- Office equipment
- Office supplies
- Radio equipment
- Special department supplies
- Technical supplies
- Tires and tubes
- Traffic signals
- Uniforms

Contracts that were classified as any of the following were excluded from this study:

- administrative items such as utility payments, leases for real estate, insurance, or banking transactions;
- fringe benefits such as payments for food, parking, or conference fees; and
- government entities and nonprofit organizations, including state agencies and federal agencies.

4.1.2 M/WBE Classifications

In this study, businesses classified as M/WBEs are firms that were at least 51 percent owned and controlled by members of one of five groups: African Americans, Hispanic Americans, Asian Americans, Native Americans, and nonminority women.

These groups were defined according to the United States Census Bureau as follows¹:

- **African Americans:** U.S. citizens or lawfully admitted permanent residents having an origin in any of the black racial groups of Africa.
- **Hispanic Americans:** U.S. citizens or lawfully admitted permanent residents of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese cultures or origins regardless of race.

¹ City and North Carolina State law definitions vary slightly from Census Bureau for the Hispanic American ethnicity definition. The City defines Hispanic as persons having origin in any of the countries of Spain. The North Carolina State law also includes those with origins in the Caribbean Islands.

- **Asian Americans:** U.S. citizens or lawfully admitted permanent residents who originate from the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.
- **Native Americans:** U.S. citizens or lawfully admitted permanent residents who originate from any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.
- **Women:** U.S. citizens or lawfully admitted permanent residents who are non-Hispanic white females. Minority women were included in their respective minority category.

4.1.3 Collection and Management of Data

To determine the most appropriate data for our use in the analysis of the City procurement activity and to identify data sources, MGT conducted interviews with key staff knowledgeable about the City's procurement processes. The decision was made by the City and MGT that procurement data would be extracted from the payment system in the Finance Department. It was determined that all subcontract data and bidder information would be collected from the contract files located in each of the Key Business Units (KBUs). The basis of the manual data collection records was derived from both the *Contracts System Contracts* in Finance and the individual payments from the general ledger system, *GEAC*.

Contract and Subcontract Data Collection

MGT began the process of collecting City contractor, bidder, and subcontract data by using the *Contracts System Contracts* database of records from Finance as a master list to identify the contracts that were awarded during the study period. Although this source did not include all the contracts that had been awarded during the study period, MGT determined that this source was the most comprehensive and reliable way to assimilate a master list of contracts for data collection. MGT used the *GEAC* system to help identify contracts not listed in the *Contracts System Contracts* database. By using the *GEAC* system, MGT combined each of the payments where the purchase order

number was the same, and the resulting total payments reflected a total contract amount. Once the two data sources were combined, we eliminated any duplicate contracts, which resulted in a master list of contracts. MGT used this master list as a basis when going through the hard copy contract files from each KBU. If a contract was found in a KBU that was not in the master contract list, that contract was added to the master list and database. Once all hard copy contracts were reviewed, the remaining payment data were brought into the contract database to include the direct pay contracts and those payments not associated with a specific purchase order. Every possible effort was made to collect 100 percent of the data from the City. MGT was able to classify these transactions into one of the five work types listed previously based on the account codes within the payment system. MGT was also able to classify each payment record into a more detailed work type based on the account code in the payment data. The decomposed work type descriptions can be found in **Appendix B**. By breaking down the payments into more detailed classifications, MGT was able to show a clearer picture of where the City's dollars were spent.

The data that were in the master contract list were as follows:

- name of firm awarded the contract;
- award amount of the contract;
- award date of the contract; and
- a description of the contract.

The data that were in the payments database were:

- vendor number of the firm that was paid, which matches the vendor database provided by the City;
- Vendor Shortname field to help identify the full vendor name;
- amount of the payment;
- date of the payment; and
- Account, Fund, and Center codes.

Data related to P-card transactions were obtained from the City. P-Cards are credit cards that key individuals maintain from each KBU that enable them to make necessary day-to-day purchases. The purchases can include items such as office supplies, gas, travel expenses, and other items. The use of P-cards has been in effect since August of 2000, and the total dollar amounts for all transactions during this time was less than 0.001 percent of the goods and supplies payments from the financial system. MGT and City staff decided to concentrate on the financial system payment data as opposed to the P-card data due to the relative insignificant dollar amount and personal discretion purchasing that can be done with the P-cards.

MGT reviewed all provided hard copy contract files located in the offices of Purchasing/Business Support Services, Engineering (including Storm Water, Special Services, and Engineering), Neighborhood Development, Utilities (CMUD), Police and Fire Departments, Charlotte Area Transit System (CATS), and the Airport. City staff were readily available for any questions that MGT had pertaining to the contract files. Please note that the contracts for the Airport and the Transportation-related contracts that were federally funded were excluded from the analyses to the extent possible due to lack of available funding source data.

MGT employees who were trained and experienced in disparity study data collection techniques collected the hard copy data. Quality control checks were enforced to minimize the occurrence of data entry and research errors within the file review process. The quality control consisted of MGT team leaders revisiting many of the project files after the data collection team had completed them, verifying the accuracy of the projects each data collection team member entered.

The files were pulled by MGT directly to ensure maximum reliability, consistency, and completeness. Upon completion of the file review, MGT staff returned the files in the manner in which they were found originally.

At the culmination of data collection, MGT provided a database of four tables to the City of Charlotte project director for approval. The first table identified all of the contracts and payments that were collected manually in addition to those received electronically from the various KBUs. The second table contained a master vendor table, which was compiled by several sources and was used as a basis for availability. The sources for available vendors will be discussed in the next section. The remaining two tables held the bidder and subcontract data.

At the time MGT submitted these lists, the City of Charlotte was asked to give necessary approvals and/or provide further documentation within a time period agreed upon by MGT and the City of Charlotte officials. City personnel returned the modifications to MGT and the changes were noted in the database used for analyses.

Availability (Vendor) Data Collection

Determining the availability of firms is a critical element in developing disparity analyses. MGT uses several sets of data to determine the percentage of firms that are available to do work for the City of Charlotte, depending on the work type of the vendor.

For the purposes of this study, MGT defines prime and subcontractors as firms that (1) have performed prime or subcontract work for the City in the past; (2) have bid on prime contract work for the City in the past; (3) have registered with any of the City's KBUs; (4) are registered with any of the associations listed below; or (5) are construction, architectural and engineering, professional services, other services, or goods and supplies firms that were in the City's GEAC accounting system. These firms are defined as available contractors because they have either performed—or have indicated their willingness to perform—prime or subcontract work for the City of Charlotte. MGT also used other availability analyses, including census data and bidder availability for comparison purposes, which will be referenced throughout this chapter.

Various agencies, M/WBE lists, and trade associations from around the City were also used to further identify the business category and ethnicity of firms. A list of all agencies contacted is shown in **Appendix C**. MGT collected lists from 14 organizations that were identified as potential sources of available vendors and ethnicity information. Additional vendors, aside from the below organizations and financial system, include those from the City's KBUs that maintained internal vendor lists. MGT was successful in collecting vendor information from the following sources:

- Carolina Minority Suppliers Development Council, Inc.;
- Charlotte Black Pages;
- Metrolina Minority Contractor's Association;
- Charlotte Chamber of Commerce
- Carolinas Association of General Contractors, Inc.;
- American Subcontractors Association of Carolinas;
- North Carolina Plumbing and Heating Contractors;
- Black Chamber of Commerce;
- Central Piedmont Community College Small Business Center;
- University Park Baptist Church Economic Development;
- North Carolina Licensing Board for General Contractors;
- Charlotte Mecklenburg Schools bidder tracking lists;
- Charlotte Mecklenburg Schools Building Services vendors;
- Mecklenburg County vendors; and
- City KBU lists from CATS, Engineering and Property Management, and Fire Department.

The vendors in the GEAC system provided the basis for the master vendor database. Most M/WBE-certified firms that had been utilized by the City in the recent past were given an "ownership code" designation in the GEAC system. This designation assisted MGT with the identification of a minority firm's ethnicity. MGT then added firms

from the above sources that were not already in the Master Vendor Database. These firms are available at the prime contract and subcontract levels:

- vendors who won contracts;
- vendors identified from the KBUs, government agencies, and trade associations listed earlier in the chapter;
- vendors who bid on contracts; and
- vendors utilized as subcontractors for primes on City contracts.

Again, the agency, trade association, and M/WBE lists were also used to identify the ethnicity and business category of firms already in the master vendor database. MGT excluded from the study the names of any firms that met the criteria for exclusion listed earlier in the chapter. Once the data were collected and entered or transferred into the MGT database, the data were processed as follows:

- The county in which the vendor operated was identified by matching ZIP codes with a ZIP code database of counties. (MGT maintains a ZIP code database containing all United States ZIP codes.) For those firms without addresses and services, MGT used a CD-ROM of yellow pages and the Internet to identify vendor address and service type.
- Records not pertinent to the study were eliminated.

Approximately 40,000 firms of a total of 82,000 were excluded from the availability analyses. The most common reasons for exclusion were:

- no business category (i.e. vendors who were not utilized , a business type was not provided or a business type could not be identified from their name) (19,037 vendors)
- one time City vendor (i.e. those vendors that are typically paid only once by the City and are not vendors for projects that are bid. As an example, property owners that are paid for right of way property. These vendors were provided to us by City staff) (6,856 vendors)
- incomplete address – could not determine county (3,588 vendors)
- City employee as identified by City staff (3,589 vendors)
- nonprofit agencies (2,219 vendors)

- governmental agencies including schools and universities (1,415 vendors)
- travel related including hotels, food, car rental, and conference fees (1,339 vendors)
- real estate (767 vendors); and
- periodicals, media, utilities, postage, hospital, and no longer in business (1,192 vendors)

The remaining 42,000 vendors make up the total master vendor table, which was used for availability; however, the actual availability is limited by the factors previously discussed in the availability methodology.

Verification Reports

MGT distributed letters and verification reports to each of the prime contractors that were awarded contracts by the City for Construction, Architecture and Engineering, and Professional Services. The verification reports requested that the firm verify:

- firm ethnicity and gender;
- the contract dollar amount and award date;
- services provided; and
- name, ethnicity, services provided by, and amount paid to any subcontractors.

The prime contractor was also asked to edit and correct the data included in the verification report and provide any additional subcontracting information not listed in the report. (See **Appendix D** for a copy of the request letter and verification report.)

The verification report mailout that contained 8,399 verification reports was sent out on March 26, 2003. Of these 8,399 reports, 2,538 were returned to MGT from the vendors. There were also 775 reports returned to MGT as having the wrong address and could not be delivered to the vendor. MGT then attempted to find the addresses that were incorrect and had limited success in doing so. Of the 7,624 reports that assumingly reached their destination, the 2,538 returned as completed reports yielded a

33 percent response rate (our experience shows that a typical response rate is between 25% and 35%). About 29 percent of the respondents were M/WBE firms. Of the reports that were returned completed to MGT, there were fewer than 5 percent of the reports in which corrections were made by the prime contracting firms. For this reason, MGT is very comfortable that the data are accurate for those firms that did not return the verification reports as well.

In March 2002 the City began requiring all companies that it contracted with to track subcontractor payments through a payment affidavit. In September 2003, MGT sent a letter to all firms that received a payment in calendar year 2002 a letter requesting the payment affidavit be completed. (See **Appendix D** for a copy of the request letter and affidavit). There were 592 contracts with payments in 2002 that the letter was sent to. Also, the City indicated those projects that were completed in 2002 and MGT followed up with a phone call to request completion of the affidavit. Seventy-six affidavits were returned and this information was added to the database and used for analysis. These affidavits added a total of \$625,000 to the construction subcontracting, \$63,500 to architecture and engineering subcontracting and \$64,000 to professional services subcontracting.

Data for Analysis

The total number of records (individual contracts/payments) analyzed for the five-year study period is shown below in **Exhibit 4-1**. The number of records are calculated from the contract database compiled by MGT staff with cooperation from the City. The exhibit shows the number of contracts or payments made for each of the five business categories, not taking into account the relevant market area calculations.

**EXHIBIT 4-1
CITY OF CHARLOTTE
NUMBER OF ANALYZED RECORDS
CALENDAR YEARS 1998 THROUGH 2002**

Business Category	# of Records
Construction	14,318
Architectural & Engineering	549
Professional Services	8,363
Other Services	112,822
Goods & Supplies	183,880

Source: MGT databases of the City's contract information.

4.1.4 Market Area Methodology

In order to establish the appropriate geographic boundaries for the statistical analysis, market areas were determined for each of the business categories included in the study. First, the overall market area was determined, and then the relevant market area was established.

Overall Market Area

A United States county is the geographical unit of measure selected for determining market area. The use of counties as geographical units is based on the following considerations:

- The courts have accepted counties as a standard geographical unit of analysis in conducting equal employment opportunity and disparity analysis.
- County boundaries are externally determined and, hence, are free from any researcher bias that might result from any arbitrary determinations of boundaries of geographical units of analysis.
- Census and other federal and state data are routinely collected and reported by county.

The counties that constituted the City of Charlotte's overall market area were determined by evaluating the total dollars expended by the City in each business category. The results were then summarized by county according to the location of each firm that provided goods or services to the City.

Relevant Market Area

The relevant market area was determined for each business category. The first step was to sum the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

The use of the “75 percent rule” for market area determination is generally accepted in antitrust cases. In another relevant case, the court accepted less than 100 percent of data when it was reasonable to assume that the missing data would not significantly change the results of the analysis.²

The data used to determine the overall and relevant market areas for the City’s business categories follow:

- number of individual vendors;
- percentage of total vendors;
- total dollars;
- percentage of total dollars;
- number of purchase orders/payments; and
- percentage of purchase orders/payments.

4.1.5 Utilization Methodology

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. Construction, architectural and engineering, professional services, other services, and goods and supplies firms utilization was derived from information contained in the City’s financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary

²James C. Jones v. New York County Human Resources Administration, 528 F.2d 696 (.2d Cir.1976)

slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

4.1.6 Availability Methodology

To evaluate disparate impact, if any, we must identify available M/WBEs in the relevant market area by each business category. This determination, referred to as *availability*, has been an issue in recent court cases. The issue is that if the availability of minority and women firms is overstated or understated, a distortion of the disparity determination will result. This distortion occurs because the quantitative measure of disparity is a direct ratio between utilization and availability.

To determine availability, several methodologies have been used, including census data, vendor data, and bidder data. Bidder data has been criticized as being too narrow. The use of census data has been criticized because it does not consider whether minority and women contractors actually are willing, available, or able to perform contracts. The use of vendor data is a more appropriate methodology, since it excludes firms that are uninterested or unable to provide goods and services to the locality. Vendor data are determined by identifying M/WBEs that have actually performed work for the locality or have expressed an interest in securing contracts. For our analysis we used vendor data as the basis of the availability component.

MGT utilized several sources, as indicated previously in this chapter, to determine prime and subcontractor availability in order to develop the appropriate availability data within the relevant market area. All of the data were then compiled into the MGT Master Vendor Database for analysis.

The next process of identifying available firms once the master vendor table has been assimilated, is to determine which of the firms are prime contractors and which are subcontractors. One way MGT accomplishes this task is by a survey of the vendors. MGT sent a short survey to the vendors in the master vendor database that asked firms

various questions, such as their ethnicity, their capability to work as a prime or subcontractor, and their primary work type. Other questions included in the survey dealt with anecdotal research rather than availability concerns. When the surveys were returned to MGT, the results were entered into the vendor database and then compared to the values that were in the database before the survey results. Second, MGT took the results from the vendor survey to further distinguish available prime contractors. On the survey instrument was a question asking the vendor if he/she had ever performed work as a prime contractor, prime consultant, or supplier on a project in either the public or private sector. If the firm answered “Never,” MGT considered these firms as available as a subcontractor only, and not available as a prime. MGT then took the percentage distribution of the returned results, identified those firms that did not respond to the survey, and reduced the prime availability accordingly.

This methodology is one approach to identify the universe of firms that are in the City’s relevant market area and available to perform work for the City. It also tends to be a conservative estimate of available firms, especially for prime contractors, because careful consideration must be given to make sure a vendor can provide services at the prime contractor level. Using this approach, we assume that all firms in the relevant market area are available to do work for the City at the subcontractor level. The prime level is adjusted based on survey responses. The prime level typically contains fewer available vendors because any vendor can perform at the subcontractor level, and not all subcontractors can perform at the prime level.

There are about 42,000 individual firms that comprised MGT’s Master Vendor Database. A summary of the total number of firms in the database by business category and the number of firms in the relevant market area is shown in **Exhibit 4-2**. In the exhibit, firms that were available to provide goods or services in more than one business category are included in each respective business category where the firm can perform

work for the City. Therefore, the figures in **Exhibit 4-2** may be greater than the total number of individual firms in the Master Vendor Database.

**EXHIBIT 4-2
AVAILABILITY OF FIRMS BY BUSINESS CATEGORY
CALENDAR YEARS 1998 THROUGH 2002**

Business Category	# of Total Firms in Database	# Relevant Market Area Firms
Construction	26,559	5,004
Architectural & Engineering	707	459
Professional Services	2,733	1,933
Other Services	7,040	5,501
Goods & Supplies	6,510	3,136

Source: MGT's Master Vendor Database

4.2 Construction Contracts Less Than \$30,000

For construction contracts under \$30,000, the State of North Carolina does not require a vendor to be licensed with the state as an available vendor. The following analyses contain a market area analysis, a utilization of vendors for contracts under \$30,000, and an availability analysis.

4.2.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determined by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

The City of Charlotte spent approximately \$27.2 million on construction projects under \$30,000 over the study period, and the City used 1,299 firms on 12,604 purchase orders/payments. Approximately \$20.8 million (76.5%) of the construction prime contract dollars were within the relevant market area as shown in **Exhibit 4-3**. The average construction purchase order/payment overall was \$2,155, and the average construction purchase order/ payment in the relevant market area was \$2,189. **Exhibit 4-3** shows the

Relevant Market Area, Utilization, and Availability Analyses

location of all firms used in the analysis of construction contracts, by county and dollar amount.

**EXHIBIT 4-3
CONSTRUCTION LESS THAN \$30,000
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of PO's/Payments	% of PO's/Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% ²
MECKLENBURG, NC	8,190	64.98%	833	64.13%	\$15,988,806.22	58.86%	58.86%
CABARRUS, NC	425	3.37%	37	2.85%	\$2,248,733.39	8.28%	67.14%
UNION, NC	315	2.50%	32	2.46%	\$1,407,729.71	5.18%	72.32%
GASTON, NC	304	2.41%	29	2.23%	\$642,365.07	2.36%	74.69%
YORK, SC	263	2.09%	29	2.23%	\$502,054.30	1.85%	76.54%
RELEVANT M.A. TOTAL	9,497	75.35%	960	73.90%	\$20,789,688.69	76.54%	N/A
WAKE, NC	261	2.07%	28	2.16%	\$695,965.87	2.56%	79.10%
GUILFORD, NC	1,219	9.67%	26	2.00%	\$1,248,287.35	4.60%	83.69%
IREDELL, NC	82	0.65%	16	1.23%	\$161,364.75	0.59%	84.29%
FULTON, GA	148	1.17%	16	1.23%	\$95,631.27	0.35%	84.64%
COOK, IL	109	0.86%	14	1.08%	\$312,130.21	1.15%	85.79%
STANLY, NC	87	0.69%	9	0.69%	\$582,049.58	2.14%	87.93%
LINCOLN, NC	45	0.36%	8	0.62%	\$100,346.72	0.37%	88.30%
RICHLAND, SC	26	0.21%	8	0.62%	\$82,256.87	0.30%	88.60%
CATAWBA, NC	49	0.39%	7	0.54%	\$394,206.35	1.45%	90.06%
DALLAS, TX	11	0.09%	7	0.54%	\$49,026.63	0.18%	90.24%
FORSYTH, NC	12	0.10%	6	0.46%	\$84,427.17	0.31%	90.55%
PHILADELPHIA, PA	14	0.11%	6	0.46%	\$42,976.91	0.16%	90.71%
ALAMANCE, NC	13	0.10%	6	0.46%	\$17,915.02	0.07%	90.77%
BUNCOMBE, NC	16	0.13%	6	0.46%	\$4,355.68	0.02%	90.79%
GWINNETT, GA	20	0.16%	5	0.38%	\$123,609.39	0.46%	91.24%
JEFFERSON, KY	50	0.40%	5	0.38%	\$16,528.29	0.06%	91.30%
ORANGE, NC	13	0.10%	5	0.38%	\$10,241.31	0.04%	91.34%
DURHAM, NC	21	0.17%	4	0.31%	\$107,783.03	0.40%	91.74%
CLEVELAND, NC	11	0.09%	4	0.31%	\$30,511.20	0.11%	91.85%
ESSEX, NJ	4	0.03%	4	0.31%	\$14,730.00	0.05%	91.90%
BALTIMORE (CITY), MD	52	0.41%	4	0.31%	\$8,027.72	0.03%	91.93%
ROWAN, NC	6	0.05%	3	0.23%	\$56,223.25	0.21%	92.14%
ALLEGHENY, PA	4	0.03%	3	0.23%	\$30,222.00	0.11%	92.25%
HENNEPIN, MN	10	0.08%	3	0.23%	\$28,752.74	0.11%	92.36%
ANNE ARUNDEL, MD	3	0.02%	3	0.23%	\$28,286.00	0.10%	92.46%
FRANKLIN, OH	11	0.09%	3	0.23%	\$22,954.60	0.08%	92.55%
FAIRFAX, VA	22	0.17%	3	0.23%	\$21,228.82	0.08%	92.63%
NEW HANOVER, NC	9	0.07%	3	0.23%	\$19,893.55	0.07%	92.70%
DU PAGE, IL	12	0.10%	3	0.23%	\$17,633.59	0.06%	92.76%
LEXINGTON, SC	6	0.05%	3	0.23%	\$14,628.89	0.05%	92.82%
KING, WA	3	0.02%	3	0.23%	\$12,601.97	0.05%	92.86%
JOHNSTON, NC	14	0.11%	3	0.23%	\$11,087.81	0.04%	92.90%
CUYAHOGA, OH	4	0.03%	3	0.23%	\$10,663.28	0.04%	92.94%
HARTFORD, CT	3	0.02%	3	0.23%	\$10,575.70	0.04%	92.98%
NEW YORK, NY	8	0.06%	3	0.23%	\$7,888.00	0.03%	93.01%
OTHER	729	5.78%	103	7.93%	\$1,898,292.10	6.99%	100.00%
Total	12,604	100.00%	1,299	100.00%	\$27,162,992.31	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

There were five counties (Mecklenburg, NC; Cabarrus, NC; Union, NC; Gaston, NC; and York, SC) that comprised the relevant market area for the Construction business category as shown in **Exhibit 4-3**. There were 9,497 purchase orders/payments awarded to 960 firms in the relevant market area.

4.2.2 Utilization Analyses

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

The utilization analysis of prime construction contractors in the relevant market area is shown in **Exhibit 4-4**. M/WBE-owned firms were awarded about 18.6 percent of the total dollars awarded by the City during the review period. The contract dollars were distributed across each of the M/WBE ethnicity categories, with nonminority women firms receiving the most in award dollars at over \$2.1 million, or 10.46 percent. Native American firms received the least amount, with 0.14 percent of the total contract dollars. A list of all construction purchase orders/payments analyzed is shown in **Appendix E**.

While analyzing the construction contract dollars by year, we found that M/WBEs appeared to be most successful in the 2001 calendar year. This determination is based on the relative percentage of prime contract dollar awards shown in **Exhibit 4-4**, where almost 21 percent of the total dollars awarded were to M/WBEs during this year. M/WBEs were not as successful in comparison to overall contract awards in other years of the study period, with the worst year being 2000, where M/WBE firms received about 15.8 percent of the contract dollars.

**EXHIBIT 4-4
CONSTRUCTION POS LESS THAN \$30,000
UTILIZATION ANALYSIS OF PRIME CONTRACTORS IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$77,320.63	2.97%	\$52,394.72	2.01%	\$38,685.97	1.49%	\$966.21	0.04%	\$284,333.57	10.93%	\$453,701.10	17.44%	\$2,148,047.26	82.56%	\$2,601,748.36
1999	\$30,497.50	1.24%	\$50,923.76	2.08%	\$29,507.50	1.20%	\$5,140.00	0.21%	\$285,351.74	11.63%	\$401,420.50	16.37%	\$2,051,395.87	83.63%	\$2,452,816.37
2000	\$285,842.47	6.45%	\$3,050.00	0.07%	\$0.00	0.00%	\$9,501.41	0.21%	\$404,373.69	9.13%	\$702,767.57	15.86%	\$3,727,409.89	84.14%	\$4,430,177.46
2001	\$639,989.06	10.57%	\$15,916.84	0.26%	\$29,700.00	0.49%	\$6,755.27	0.11%	\$578,021.29	9.55%	\$1,270,382.46	20.99%	\$4,781,661.25	79.01%	\$6,052,043.71
2002	\$263,620.08	5.02%	\$10,317.00	0.20%	\$145,483.44	2.77%	\$5,787.64	0.11%	\$622,000.69	11.84%	\$1,047,208.85	19.94%	\$4,205,693.94	80.06%	\$5,252,902.79
Total	\$1,297,269.74	6.24%	\$132,602.32	0.64%	\$243,376.91	1.17%	\$28,150.53	0.14%	\$2,174,080.98	10.46%	\$3,875,480.48	18.64%	\$16,914,208.21	81.36%	\$20,789,688.69

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

Additional analyses based on the utilization of vendors certified by the City of Charlotte was also completed by MGT. **Appendix F, Exhibit F-1**, shows the utilization of construction prime contractors that were certified as an M/WBE firm by the City's MWBD Office; **Exhibit F-2** shows the number of POs and unique vendors based on the City's certified vendors. While comparing the exhibits, it can be seen that most M/WBEs who received POs were not certified as minority or women-owned firms. The reason for this is that to obtain the ethnicity and gender, we also used survey and verification reports in which the vendor self reported their ethnicity or gender and other sources of vendor data that had ethnicity or gender listed.

Exhibits 4-5 and **4-6** show the number of prime construction contracts/purchase orders and the number of unique firms utilized during the study period. In **Exhibit 4-5**, we show that 1,142 POs were awarded in the relevant market area, with almost 87 percent of those POs going to nonminority-owned firms. M/WBEs received about 13 percent of the awards, and firms owned by nonminority women were the more successful M/WBE group in terms of the number of awarded City contracts. Please note that MGT is counting the number of purchase orders in the charts below, and not individual payments or direct pays. This was done because a single project could have multiple payments, which would not be reflective of actual procurements by City. All individual payments on a single purchase order were combined into one record in the database to return a more accurate representation of the City's procurements. In **Exhibit 4-6** we show that 146 M/WBE firms participated in City construction projects at the prime contractor level. In comparison, 814 nonminority owned firms were hired during the same period.

**EXHIBIT 4-5
CONSTRUCTION POs LESS THAN \$30,000
PRIME CONTRACTS/PURCHASE ORDERS AWARDED IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs #
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	4	1.56%	2	0.78%	1	0.39%	1	0.39%	21	8.20%	29	11.33%	227	88.67%	256
1999	7	2.24%	7	2.24%	2	0.64%	0	0.00%	32	10.22%	48	15.34%	265	84.66%	313
2000	9	3.37%	0	0.00%	0	0.00%	2	0.75%	20	7.49%	31	11.61%	236	88.39%	267
2001	5	3.09%	0	0.00%	1	0.62%	0	0.00%	11	6.79%	17	10.49%	145	89.51%	162
2002	1	0.69%	0	0.00%	6	4.17%	1	0.69%	20	13.89%	28	19.44%	116	80.56%	144
Total POs	26	2.28%	9	0.79%	10	0.88%	4	0.35%	104	9.11%	153	13.40%	989	86.60%	1,142

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of contracts/purchase orders awarded annually for construction projects less than \$30,000.

**EXHIBIT 4-6
CONSTRUCTION PROJECTS LESS THAN \$30,000
NUMBER OF INDIVIDUAL PRIME CONTRACTORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	12	4.49%	2	0.75%	2	0.75%	3	1.12%	23	8.61%	42	15.73%	225	84.27%	267
1999	9	2.96%	3	0.99%	2	0.66%	2	0.66%	29	9.54%	45	14.80%	259	85.20%	304
2000	14	4.02%	2	0.57%	0	0.00%	4	1.15%	32	9.20%	52	14.94%	296	85.06%	348
2001	17	4.09%	3	0.72%	1	0.24%	3	0.72%	35	8.41%	59	14.18%	357	85.82%	416
2002	17	3.88%	4	0.91%	2	0.46%	6	1.37%	46	10.50%	75	17.12%	363	82.88%	438
Total Unique Vendors Over Five Years ²	38	3.96%	6	0.63%	5	0.52%	10	1.04%	87	9.06%	146	15.21%	814	84.79%	960

Sources: MGT developed, and Commonwealth of Virginia verified, contract and vendor database from fiscal years 1998 to 2002.

¹ Percent of Total Contracts.

¹ Percent of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

4.2.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for construction was derived from those firms (1) have performed prime or subcontract construction work for the City in the past; (2) have bid on construction contract work for the City in the past; (3) have registered with any of the City's KBUs as contractors; (4) are registered with Metrolina Minority Contractor's Association, Carolinas Association of General Contractors, American Subcontractors Association of Carolinas, North Carolina Plumbing and heating Contractors, or North Carolina Licensing Board for General Contractors, or (5) performed or bid on construction work for Mecklenburg County or Charlotte-Mecklenburg Schools.

As shown in **Exhibit 4-7**, about 19 percent (398 firms) of prime contractors available to do business with the City were M/WBEs. Nonminority women-owned firms accounted for 7.16 percent (152 firms) of the available firms. African American-owned firms represented 8.55% (180) of the identified M/WBEs.

4.3 Construction Contracts Greater Than \$30,000

For contracts \$30,000 and over, construction firms must be licensed to be able to perform construction work. MGT received a list of licensed vendors from the North Carolina Licensing Board of General Contractors to conduct analyses of the City procurements based on the \$30,000 licensing requirement set forth by the state. The following analyses contain a market area analysis, a utilization analysis, and an availability analysis of vendors for contracts greater than or equal to \$30,000. It should be noted that for construction contracts, the City is required to award to the lowest responsible bidder.

**EXHIBIT 4-7
CONSTRUCTION
AVAILABILITY OF PRIME CONTRACTORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	180	8.55%	37	1.74%	17	0.82%	13	0.61%	152	7.19%	398	18.91%	1,708	81.09%	2,106

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

Note: These numbers are adjusted as being prime contractors only.

4.3.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determined by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

The City of Charlotte spent approximately \$1.4 billion on construction projects greater than or equal to \$30,000 over the study period, and the City used 385 firms on 1,714 purchase orders/payments. Approximately \$1.1 billion (77.3%) of the construction prime contract dollars were within the relevant market area. The average construction purchase order/payment overall was \$838,705, and the average construction purchase order/payment in the relevant market area was \$741,375. **Exhibit 4-8** shows the location of all firms used in the analysis of construction contracts, by county and dollar amount.

There were 17 counties that comprised the relevant market area for the construction business category for projects greater than \$30,000 as shown in **Exhibit 4-8**. There were 1,498 purchase orders/payments awarded to 309 firms in relevant market area.

4.3.2 Utilization Analyses

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

**EXHIBIT 4-8
CONSTRUCTION GREATER THAN \$30,000
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of POs/Payments	% of POs/Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% ²
MECKLENBURG, NC	1,097	64.00%	214	55.58%	\$766,955,353.01	53.35%	53.35%
CABARRUS, NC	62	3.62%	14	3.64%	\$13,050,191.89	0.91%	54.26%
WAKE, NC	28	1.63%	12	3.12%	\$11,171,267.88	0.78%	55.04%
GASTON, NC	22	1.28%	10	2.60%	\$5,432,008.00	0.38%	55.41%
UNION, NC	79	4.61%	9	2.34%	\$80,337,722.18	5.59%	61.00%
FULTON, GA	16	0.93%	7	1.82%	\$19,651,470.73	1.37%	62.37%
COOK, IL	9	0.53%	6	1.56%	\$6,975,004.13	0.49%	62.86%
YORK, SC	44	2.57%	5	1.30%	\$24,439,871.38	1.70%	64.56%
LINCOLN, NC	23	1.34%	5	1.30%	\$11,125,191.57	0.77%	65.33%
GUILFORD, NC	9	0.53%	5	1.30%	\$1,924,093.34	0.13%	65.46%
STANLY, NC	59	3.44%	4	1.04%	\$46,178,329.90	3.21%	68.68%
IREDELL, NC	10	0.58%	4	1.04%	\$6,614,111.85	0.46%	69.14%
CATAWBA, NC	16	0.93%	3	0.78%	\$59,592,048.08	4.15%	73.28%
JEFFERSON, AL	4	0.23%	3	0.78%	\$4,470,830.61	0.31%	73.59%
FORSYTH, NC	7	0.41%	3	0.78%	\$2,478,038.30	0.17%	73.76%
RICHLAND, SC	9	0.53%	3	0.78%	\$1,388,351.00	0.10%	73.86%
MONTGOMERY, OH	4	0.23%	2	0.52%	\$48,797,228.90	3.39%	77.26%
RELEVANT M.A. TOTAL	1,498	87.40%	309	80.26%	\$1,110,581,112.75	77.26%	N/A
COBB, GA	5	0.29%	2	0.52%	\$24,432,190.44	1.70%	78.96%
RUTHERFORD, NC	35	2.04%	2	0.52%	\$19,537,109.54	1.36%	80.31%
JEFFERSON, KY	6	0.35%	2	0.52%	\$5,023,961.06	0.35%	80.66%
WILSON, NC	7	0.41%	2	0.52%	\$3,710,272.09	0.26%	80.92%
GRANVILLE, NC	3	0.18%	2	0.52%	\$3,132,313.22	0.22%	81.14%
CHAUTAUQUA, NY	8	0.47%	2	0.52%	\$2,084,129.02	0.14%	81.28%
GREENVILLE, SC	7	0.41%	2	0.52%	\$1,707,281.04	0.12%	81.40%
LEXINGTON, SC	3	0.18%	2	0.52%	\$737,368.68	0.05%	81.45%
DURHAM, NC	3	0.18%	2	0.52%	\$420,855.50	0.03%	81.48%
CUMBERLAND, NC	4	0.23%	2	0.52%	\$140,850.82	0.01%	81.49%
ORANGE, NC	2	0.12%	2	0.52%	\$120,091.15	0.01%	81.50%
GWINNETT, GA	2	0.12%	1	0.26%	\$57,872,848.80	4.03%	85.53%
ROCKDALE, GA	4	0.23%	1	0.26%	\$41,031,087.40	2.85%	88.38%
LAKE, FL	24	1.40%	1	0.26%	\$28,636,175.60	1.99%	90.37%
MC MINN, TN	7	0.41%	1	0.26%	\$20,868,419.68	1.45%	91.83%
JACKSON, NC	2	0.12%	1	0.26%	\$19,166,995.76	1.33%	93.16%
EDGECOMBE, NC	2	0.12%	1	0.26%	\$16,955,879.70	1.18%	94.34%
SAINT LOUIS CITY (CITY), MO	4	0.23%	1	0.26%	\$12,962,688.93	0.90%	95.24%
HAYWOOD, NC	12	0.70%	1	0.26%	\$10,666,297.06	0.74%	95.98%
LITCHFIELD, CT	2	0.12%	1	0.26%	\$7,060,548.05	0.49%	96.47%
TARRANT, TX	3	0.18%	1	0.26%	\$6,397,633.00	0.45%	96.92%
CARROLL, GA	3	0.18%	1	0.26%	\$6,128,767.46	0.43%	97.35%
CLEVELAND, NC	6	0.35%	1	0.26%	\$4,908,752.65	0.34%	97.69%
OTHER	62	3.62%	42	10.91%	\$33,257,556.98	2.31%	100.00%
Total	1,714	100.00%	385	100.00%	\$1,437,541,186.38	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

For firms located in the relevant market area, the following analyses were conducted:

- utilization analysis of dollars for all M/WBE and non-M/WBE prime contractors by calendar year for the five years of the study;
- utilization by department of all M/WBE and nonminority prime contractors by calendar year for the five years of the study period;
- analyses of construction dollars according to dollar ranges; and
- utilization analysis of the number of contracts awarded and the individual firms awarded those contracts, according to race/ethnicity/gender classifications.

The utilization analysis of prime construction contractors in the relevant market area is shown in **Exhibit 4-9**. M/WBE-owned firms were awarded about 14.7 percent of the total dollars awarded by the City during the review period. The contract dollars were distributed across each of the M/WBE ethnicity categories, with nonminority women firms receiving the most in award dollars at just over \$73.8 million, or 6.65 percent. Hispanic American firms received the least amount, with 0.04 percent of the total contract dollars.

While analyzing the construction contract dollars by year, we found that M/WBEs appeared to be most successful in winning contracts in the 1998 calendar year. This determination is based on the relative percentage of prime contract dollar awards shown in **Exhibit 4-9**, where almost 22 percent of the total dollars awarded were to M/WBEs during this year. M/WBEs were not as successful in comparison to overall contract awards in other years of the study period, with the worst year being 1999, where M/WBE firms received about 10.9 percent of the contract dollars. A list of construction contracts greater than \$30,000 analyzed is shown in **Appendix G**.

**EXHIBIT 4-9
CONSTRUCTION PAYMENTS GREATER THAN OR EQUAL TO \$30,000
UTILIZATION ANALYSIS OF PRIME CONTRACTORS IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$6,865,666.84	4.36%	\$0.00	0.00%	\$10,964,523.35	6.97%	\$3,048,087.00	1.94%	\$13,561,704.41	8.61%	\$34,439,981.60	21.88%	\$122,981,887.32	78.12%	\$157,421,868.92
1999	\$6,231,488.81	2.82%	\$299,194.00	0.14%	\$6,744,635.30	3.05%	\$0.00	0.00%	\$10,765,818.49	4.87%	\$24,041,136.60	10.88%	\$196,988,616.12	89.12%	\$221,029,752.72
2000	\$8,959,996.57	3.35%	\$0.00	0.00%	\$9,935,844.00	3.71%	\$0.00	0.00%	\$12,231,494.28	4.57%	\$31,127,334.85	11.62%	\$236,697,480.75	88.38%	\$267,824,815.60
2001	\$5,879,460.86	2.31%	\$0.00	0.00%	\$8,504,679.54	3.34%	\$0.00	0.00%	\$18,778,207.62	7.37%	\$33,162,348.02	13.01%	\$221,650,833.89	86.99%	\$254,813,181.91
2002	\$8,966,475.26	4.28%	\$149,213.42	0.07%	\$13,519,144.14	6.45%	\$64,053.37	0.03%	\$18,533,063.29	8.85%	\$41,231,949.48	19.68%	\$168,259,544.12	80.32%	\$209,491,493.60
Total	\$36,903,088.34	3.32%	\$448,407.42	0.04%	\$49,668,826.33	4.47%	\$3,112,140.37	0.28%	\$73,870,288.09	6.65%	\$164,002,750.55	14.77%	\$946,578,362.20	85.23%	\$1,110,581,112.75

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

Additional analyses based on the utilization of vendors certified by the City of Charlotte was also completed by MGT. **Appendix F, Exhibits F-3 and F-4**, show the utilization of construction prime contractors that were certified as an M/WBE firm by the City's MWBD Office. Unlike construction POs less than \$30,000 (where the majority of M/WBE firms were not certified), the M/WBEs for projects greater than or equal to \$30,000 were more likely to be M/WBE certified firms. Twenty-nine of the 54 M/WBEs in this category were certified.

Exhibits 4-10 and 4-11 show the number of purchase orders and the number of prime construction firms utilized during the study period. In **Exhibit 4-10**, we show that 1,435 POs were awarded in the relevant market area, with almost 77 percent of those contracts going to nonminority-owned firms. M/WBEs received about 23 percent of the contract awards, and firms owned by nonminority women were the more successful M/WBE group in terms of the number of awarded City contracts. Please note that MGT is counting the number of purchase orders in the charts below, and not individual payments or direct pays. This was done because a single project could have multiple payments, which would not be reflective of actual procurements by City. All individual payments on a single purchase order were combined into one record in the database to return a more accurate representation of the City's procurements. In **Exhibit 4-11** we show that 54 M/WBE firms participated in City construction projects at the prime contractor level. In comparison, 255 nonminority owned firms were hired during the same period.

MGT further analyzed the utilization of M/WBE construction firms by examining POs in specific dollar ranges. The established ranges follow:

- POs \$29,999 and under;
- POs between \$30,000 and \$250,000;
- POs between \$250,001 and \$500,000;
- POs between \$500,001 and \$1 million; and
- POs over \$1 million.

**EXHIBIT 4-10
CONSTRUCTION POs GREATER THAN OR EQUAL TO \$30,000
PRIME CONTRACTS AWARDED IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	14	6.64%	0	0.00%	11	5.21%	2	0.95%	17	8.06%	44	20.85%	167	79.15%	211
1999	12	4.56%	1	0.38%	12	4.56%	0	0.00%	25	9.51%	50	19.01%	213	80.99%	263
2000	19	6.64%	0	0.00%	14	4.90%	0	0.00%	34	11.89%	67	23.43%	219	76.57%	286
2001	25	7.23%	0	0.00%	22	6.36%	0	0.00%	35	10.12%	82	23.70%	264	76.30%	346
2002	19	5.78%	2	0.61%	27	8.21%	1	0.30%	46	13.98%	95	28.88%	234	71.12%	329
Total PO's	89	6.20%	3	0.21%	86	5.99%	3	0.21%	157	10.94%	338	23.55%	1,097	76.45%	1,435

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of purchase orders awarded annually for construction projects less than \$30,000.

**EXHIBIT 4-11
CONSTRUCTION PROJECTS GREATER THAN OR EQUAL TO \$30,000
NUMBER OF INDIVIDUAL PRIME CONTRACTORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	5	5.62%	0	0.00%	3	3.37%	1	1.12%	7	7.87%	16	17.98%	73	82.02%	89
1999	5	4.39%	1	0.88%	3	2.63%	0	0.00%	11	9.65%	20	17.54%	94	82.46%	114
2000	10	7.63%	0	0.00%	2	1.53%	0	0.00%	15	11.45%	27	20.61%	104	79.39%	131
2001	8	5.67%	0	0.00%	3	2.13%	0	0.00%	14	9.93%	25	17.73%	116	82.27%	141
2002	7	6.54%	1	0.93%	3	2.80%	1	0.93%	14	13.08%	26	24.30%	81	75.70%	107
Total Unique Vendors Over Five Years ²	18	5.83%	2	0.65%	4	1.29%	1	0.32%	29	9.39%	54	17.48%	255	82.52%	309

Sources: MGT developed, and Commonwealth of Virginia verified, contract and vendor database from fiscal years 1998 to 2002.

¹ Percent of Total Contracts.

¹ Percent of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

Purchase Orders \$29,999 and Under

The City of Charlotte awarded 1,142 purchase orders between calendar years 1998 and 2002 for prime construction contracts of \$29,999 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-12**. As **Exhibit 4-12** illustrates, M/WBEs received 13.22 percent of the POs in this category. Nonminority women-owned firms were the most utilized M/WBEs in this dollar range, receiving 9.02 percent of the purchase orders. Non-M/WBEs received 86.78 percent of the POs.

Purchase Orders between \$30,000 and \$250,000

A total of 725 purchase orders were awarded for construction services between \$30,000 and \$250,000 in the five-year study period. M/WBEs received 173 POs in this dollar range. Nonminority women firms received the most POs in this dollar threshold for M/WBEs with 82. Nonminority firms won just over 75 percent of these POs.

Purchase Orders between \$250,001 and \$500,000

There were 245 awards for construction POs between \$250,001 and \$500,000. More than 24 percent of these went to M/WBE firms. Nonminority women firms once again were awarded the most of any M/WBE category with 26.

Purchase Orders Between \$500,001 and \$1 Million

There were 225 awards for construction purchase orders between \$500,001 and \$1 million. More than 26 percent of these went to M/WBE firms. This dollar threshold was the most successful for M/WBEs even though Hispanic American-owned and Native American-owned firms did not receive a PO in this range.

**EXHIBIT 4-12
CITY OF CHARLOTTE THRESHOLD ANALYSIS
UTILIZATION OF CONSTRUCTION POs IN RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs Awarded
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
Less than or Equal to \$29,999	25	2.19%	9	0.79%	10	0.88%	4	0.35%	103	9.02%	151	13.22%	991	86.78%	1,142
Between \$30,000 and \$250,000	47	6.48%	2	0.28%	41	5.66%	1	0.14%	82	11.31%	173	23.86%	552	76.14%	725
Between \$250,001 and \$500,000	15	6.12%	1	0.41%	17	6.94%	1	0.41%	26	10.61%	60	24.49%	185	75.51%	245
Between \$500,001 and \$1 million	17	7.56%	0	0.00%	11	4.89%	0	0.00%	31	13.78%	59	26.22%	166	73.78%	225
Greater than \$1 million	9	3.75%	0	0.00%	17	7.08%	1	0.42%	18	7.50%	45	18.75%	195	81.25%	240
Total	113	4.38%	12	0.47%	96	3.73%	6	0.23%	260	10.09%	488	18.94%	2,089	81.06%	2,577

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total POs awarded annually to prime contractors.

Purchase Orders Over \$1 million

Of the 240 purchase orders awarded for \$1 million or more, 45 M/WBE firms received prime construction POs. Seventeen of the 45 POs (7.08%) went to Asian American-owned firms, and 18 of the 45 POs (7.50%) went to nonminority women.

Purchase Order Dollar Ranges

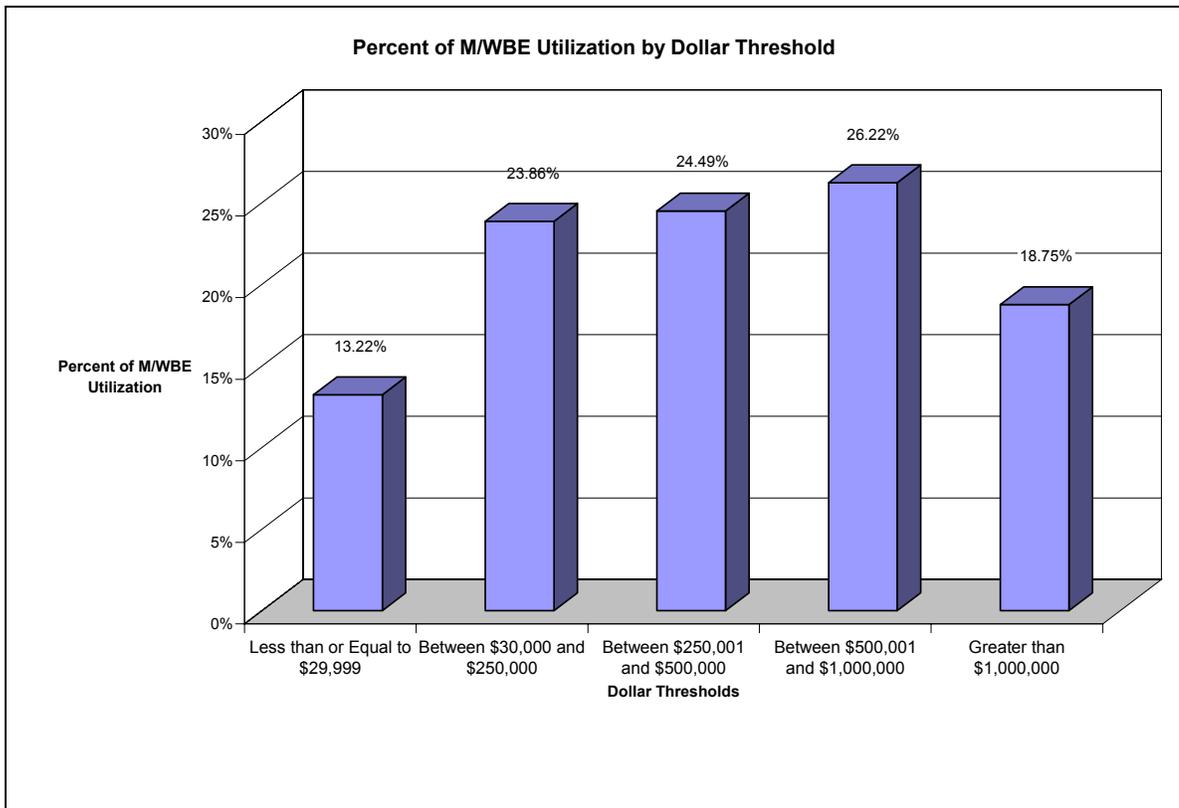
When all purchase order dollar groups are compared, it appears there is a relatively consistent distribution of purchase orders awarded to M/WBEs in each of the dollar thresholds. The M/WBE firms won a higher percentage of POs between \$500,001 and \$1 million than any other dollar threshold category. **Exhibit 4-13** shows a comparison graph of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as contract dollars rose. Overall, M/WBEs' share was 18.94 percent of the total number of POs. For purchase orders valued at \$250,001 to \$500,000, about 24 percent of the POs were awarded to M/WBEs. M/WBE firms were awarded 26.22 percent of the POs between \$500,001 to \$1 million. Most construction purchase orders were contracted to non-M/WBE firms, which won approximately 82 percent of the POs in all ranges.

Subcontractor Utilization

As stated in Section 4.1.3, MGT collected subcontractor data from the hard copy files reviewed at the City. In addition, MGT sent out verification reports to prime contractors to verify the information we had collected, as well as add any subcontractors we did not have in the database. While the City has relatively complete data on M/WBE subcontractors, there was limited data available related to nonminority male subcontracting (it was not requested of the prime contractors to report this data to the City until March 2002). Since March 2002, the City has required that prime contractors complete a final payment affidavit that includes all subcontractors. The utilization

analysis presented below is based on the hard copy data collected, as well as verification reports and payment affidavits received. Analyses based on verification reports and affidavits only are presented in **Appendix I**. It should be noted that this data is heavily weighted towards M/WBEs because that was the data available. We also present an analysis based on estimated total subcontracting dollars.

**EXHIBIT 4-13
CITY OF CHARLOTTE
UTILIZATION OF M/WBE PRIME CONSTRUCTION CONTRACTORS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

The analysis of subcontractor utilization is based on the subcontract dollars awarded within the prime contractor relevant market area. During the study period, at least one firm from each ethnicity category received construction subcontracts. Of the almost \$23 million in M/WBE subcontracts, firms owned by nonminority women received

over \$11 million, and firms owned by African Americans received \$9.7 million. Subcontractor utilization for the City's construction awards is shown in **Exhibit 4-14** as dollar amounts paid and the percentage of subcontract dollars. The total awards for construction projects in the relevant market area came to about \$1.13 billion. A list of subcontracts analyzed is included as **Appendix G**.

When we compare the percentage of total subcontractor dollars awarded to M/WBEs using the three subcontractor analyses, the effect of the incomplete nonminority male subcontractor data is highlighted. Using the full set of subcontractor data (**Exhibit 4-14**), 68 percent of subcontractor dollars went to M/WBEs; compared to verification reports (**Exhibit I-1**) 60 percent of subcontractor dollars went to M/WBEs, and compared to the payment affidavits (**Exhibit I-4**) – 38 percent of subcontractor dollars to M/WBEs.

Because of this incomplete data related to subcontracting, we provide in **Exhibit 4-15** an analysis of subcontracting utilization based on a subcontracting level of 27.1 percent. According to census data construction subcontracting for the State of North Carolina is 27.1 percent³. Based on this analysis, total M/WBE subcontracting ranges from 2.25 percent to 12.47 percent.⁴

As with Construction Prime utilization, MGT also analyzed the utilization of M/WBE subcontracting firms by examining contracts in specific dollar ranges. The established ranges for subcontractors follow:

- contracts \$50,000 and under;
- contracts between \$50,001 and \$100,000;
- contracts between \$100,001 and \$250,000; and
- contracts over \$250,000.

³Census Bureau, Census of Construction 1997, Construction Geographic Area Series, Table 2, General Statistics of establishments with payroll by state, at 9. Private sector building permit data shows subcontracting dollars at 32 percent of prime contract dollars.

⁴ MGT performed this subcontractor based on various subcontracting percent assumptions. Disparity would exist at the 10-15% subcontracting range.

**EXHIBIT 4-14
SUBCONTRACTOR UTILIZATION
BASED ON OVERALL LEVEL OF SUBCONTRACTING
CALENDAR YEARS 1998 THROUGH 2002**

	Total Construction \$¹	Subcontract Dollars ²	African American	Hispanic American	Asian American	Native American	Nonminority Women	M/WBE Total
1998	157,421,868.92	42,661,326.48	3.93%	0.68%	0.11%	0.00%	4.77%	9.49%
1999	221,029,752.72	59,899,062.99	4.21%	0.74%	0.00%	0.08%	3.72%	8.74%
2000	267,824,815.60	72,580,525.03	5.12%	0.65%	0.02%	0.68%	6.01%	12.47%
2001	254,813,181.91	69,054,372.30	2.18%	0.21%	0.06%	0.00%	2.88%	5.33%
2002	209,491,493.60	56,772,194.77	0.57%	0.06%	0.05%	0.06%	1.52%	2.25%
Total	1,110,581,112.75	300,967,481.56	3.24%	0.46%	0.04%	0.19%	0.04	7.74%

¹ Based on Construction greater then \$30,000 for calendar years 1998 through 2002

² Based on 27.1 percent construction subcontractor utilization

Contracts \$50,000 and Under

There were 633 construction subcontracts between calendar years 1998 and 2002 for subcontracts of \$50,000 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-16**. As **Exhibit 4-16** illustrates, nonminority women-owned firms were the most utilized M/WBEs in this dollar range, receiving 307 subcontracts.

Contracts between \$50,000 and \$100,000

One hundred fifty-three subcontracts were awarded by primes for construction services between \$50,000 and \$100,000 in the five-year study period. Nonminority women firms received the most subcontracts with 67, and African American firms received the second most subcontracts in this dollar threshold for M/WBEs with 43.

**EXHIBIT 4-15
CONSTRUCTION
UTILIZATION ANALYSIS OF SUBCONTRACTORS
IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority		Total Sub Dollars Awarded ²
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	
1998	\$1,678,019.35	25.18%	\$288,688.86	4.33%	\$44,905.00	0.67%	\$1,000.00	0.02%	\$2,036,629.39	30.56%	\$4,049,242.60	60.75%	\$2,615,877.45	39.25%	\$6,665,120.05
1999	\$2,518,807.61	40.07%	\$443,898.13	7.06%	\$0.00	0.00%	\$45,078.00	0.72%	\$2,227,522.53	35.43%	\$5,235,306.27	83.28%	\$1,051,374.95	16.72%	\$6,286,681.22
2000	\$3,716,839.76	27.08%	\$470,356.36	3.43%	\$11,180.00	0.08%	\$489,967.63	3.57%	\$4,364,416.00	31.80%	\$9,052,759.75	65.95%	\$4,673,496.51	34.05%	\$13,726,256.26
2001	\$1,504,824.62	32.87%	\$143,131.67	3.13%	\$40,495.00	0.88%	\$2,500.00	0.05%	\$1,991,306.36	43.50%	\$3,682,257.65	80.44%	\$895,656.40	19.56%	\$4,577,914.05
2002	\$321,319.70	11.52%	\$31,522.56	1.13%	\$30,000.00	1.08%	\$31,365.00	1.12%	\$865,576.30	31.03%	\$1,279,783.56	45.87%	\$1,510,079.99	54.13%	\$2,789,863.55
Total	\$9,739,811.04	28.61%	\$1,377,597.58	4.05%	\$126,580.00	0.37%	\$569,910.63	1.67%	\$11,485,450.58	33.74%	\$23,299,349.83	68.44%	\$10,746,485.30	31.56%	\$34,045,835.13

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 to 2002.

¹ Percentage of Total Dollars Awarded.

² The Total Dollars Awarded is the actual amount awarded to all subcontractors.

**EXHIBIT 4-16
CITY OF CHARLOTTE
UTILIZATION OF CONSTRUCTION SUBCONTRACTORS IN RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Contracts and POs Awarded
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
Less than or Equal to \$50,000	142	22.43%	35	5.53%	6	0.95%	7	1.11%	307	48.50%	497	78.52%	136	21.48%	633
Between \$50,000 and \$100,000	44	28.76%	5	3.27%	1	0.65%	1	0.65%	67	43.79%	118	77.12%	35	22.88%	153
Between \$100,001 and \$250,000	14	36.84%	2	5.26%	0	0.00%	0	0.00%	13	34.21%	29	76.32%	9	23.68%	38
Greater than \$250,000	6	26.09%	1	4.35%	0	0.00%	1	4.35%	7	30.43%	15	65.22%	8	34.78%	23
Total	206	24.32%	43	5.08%	7	0.83%	9	1.06%	394	46.52%	659	77.80%	188	22.20%	847

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 to 2002.

¹ Percentage of total number of subcontracts awarded to subcontractors.

Contracts between \$100,001 and \$250,000

There were 38 subcontracts awarded for construction projects over \$100,000, but less than \$250,000. Thirteen subcontracts were awarded to nonminority women and 14 subcontracts to African American firms. There were no Asian American or Native American subcontracting firms utilized for this size project during the study period.

Contracts over \$250,000

Of the 23 subcontracts awarded by primes for \$250,000 or more, 15 M/WBE firms received a construction subcontract. Seven of the 15 contracts went to nonminority women-owned firms, six contracts went to African Americans, and Hispanic Americans and Asian Americans each received one.

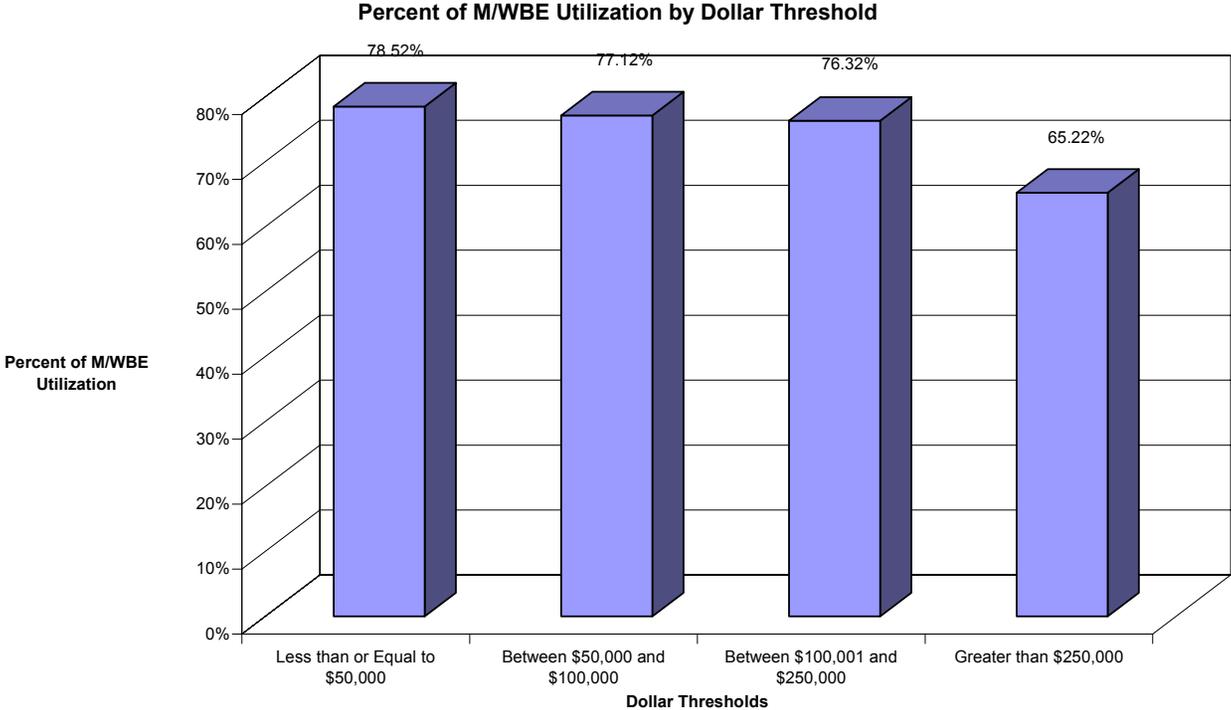
Contract dollar ranges

When all contract dollar groups are compared, there appears to be a trend of subcontracts awarded to M/WBEs in each of the dollar thresholds. The M/WBE firms were being utilized a great deal for the smaller subcontracts, and the larger the subcontract value, the less frequently M/WBE firms were being utilized. **Exhibit 4-17** shows a comparison graph of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as subcontract dollars rose.

4.3.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for construction greater than \$30,000 was derived from those firms (1) have performed prime or subcontract construction work for the City in the past; (2) have bid on construction contract work for the City in the past; (3) have registered with any of the City's KBUs as contractors; (4) are registered with Metrolina Minority Contractor's Association, Carolinas Association of General Contractors, American Subcontractors Association of Carolinas, North Carolina Plumbing and Heating Contractors, or (5) performed or bid on construction work for Mecklenburg County or Charlotte-Mecklenburg Schools **and** are registered with the North Carolina Licensing Board for General Contractors.

**EXHIBIT 4-17
CITY OF CHARLOTTE
UTILIZATION OF M/WBE CONSTRUCTION SUBCONTRACTORS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 to 2002.

All firms that met the qualifications stated above, are considered subcontractors available to perform construction work for the City. MGT took the results from the vendor survey to further distinguish available prime contractors. On the survey instrument there was a question asking the vendor if he/she had ever performed work as a prime contractor, prime consultant, or supplier on a project in either the public or private sector. If the firm answered “Never,” MGT considered these firms as available as a subcontractor only, and not available as a prime. MGT then took the percentage distribution of the returned results, identified those firms that did not respond to the survey, and reduced the prime availability accordingly.

The availability analysis is based on firms that were located within the relevant market area. As shown in **Exhibit 4-18**, about 5 percent (213 firms) of prime contractors available to do business with the City were M/WBEs. Nonminority women-owned firms accounted for 2.73 percent (117 firms) of the available contractors, and African American-owned firms .95 percent. **Exhibit 4-19** shows subcontractor availability. Of the 11,513 available construction subcontractor firms, 667 (5.79%) were M/WBEs. About 2.95 percent (335 firms) of available subcontractor firms are African American-owned firms.

4.3.4 Construction Analysis by City Key Business Unit

This analysis for construction deals with the utilization dollars by City Department or Key Business Unit (KBU). Each payment made on behalf of a department for a construction-related purchase was counted in this analysis. The department name was identified by the center number in the GEAC accounting system. City staff were asked by MGT to provide a listing of department names with the associated center number. There were a few center numbers the City could not provide. These transactions are labeled as an “unknown” department name in the charts. In **Exhibit 4-20**, there is a

**EXHIBIT 4-18
CONSTRUCTION
AVAILABILITY OF PRIME CONTRACTORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	40	0.95%	14	0.34%	26	0.62%	17	0.40%	117	2.76%	214	5.06%	4,013	94.94%	4,227

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

Note: These numbers are adjusted as being prime contractors only.

**EXHIBIT 4-19
CONSTRUCTION
AVAILABILITY OF SUBCONTRACTORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	335	2.91%	57	0.50%	26	0.23%	17	0.15%	233	2.02%	668	5.80%	10,845	94.20%	11,513

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-20
CONSTRUCTION
UTILIZATION OF PRIME CONTRACTORS BY DEPARTMENT
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Department Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
AVIATION	\$2,811,973.63	1.63%	\$0.00	0.00%	\$4,228,804.15	2.45%	\$0.00	0.00%	\$3,309,076.17	1.92%	\$10,349,853.95	6.00%	\$162,057,905.36	94.00%	\$172,407,759.31
BUSINESS SUPPORT SERV	\$0.00	0.00%	\$299,194.00	51.44%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$299,194.00	51.44%	\$282,495.28	48.56%	\$581,689.28
CATS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$85,211.70	1.44%	\$85,211.70	1.44%	\$5,819,535.38	98.56%	\$5,904,747.08
CMUD	\$8,867,996.24	1.81%	\$0.00	0.00%	\$3,822,816.94	0.78%	\$0.00	0.00%	\$46,054,363.73	9.41%	\$58,745,176.91	12.00%	\$430,873,439.18	88.00%	\$489,618,616.09
ENGINEERING & PROPERT	\$24,216,129.40	6.34%	\$149,213.42	0.04%	\$40,481,556.32	10.60%	\$3,112,140.37	0.81%	\$17,379,244.97	4.55%	\$85,338,284.48	22.35%	\$296,550,885.22	77.65%	\$381,889,169.70
FINANCE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$83,288.00	100.00%	\$83,288.00
NEIGHBORHOOD DEVELOP	\$58,500.00	7.35%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$58,500.00	7.35%	\$737,427.05	92.65%	\$795,927.05
POLICE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$530,929.37	35.20%	\$530,929.37	35.20%	\$977,527.04	64.80%	\$1,508,456.41
SOLID WASTE SERVICES	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$131,540.41	100.00%	\$131,540.41
TRANSPORTATION	\$948,489.07	1.98%	\$0.00	0.00%	\$1,048,629.39	2.19%	\$0.00	0.00%	\$1,746,177.63	3.65%	\$3,743,296.09	7.82%	\$44,130,572.86	92.18%	\$47,873,868.95
UNKNOWN	\$0.00	0.00%	\$0.00	0.00%	\$87,019.53	0.89%	\$0.00	0.00%	\$4,765,284.52	48.69%	\$4,852,304.05	49.58%	\$4,933,746.42	50.42%	\$9,786,050.47
Total	\$36,903,088.34	3.32%	\$448,407.42	0.04%	\$49,668,826.33	4.47%	\$3,112,140.37	0.28%	\$73,870,288.09	6.65%	\$164,002,750.55	14.77%	\$946,578,362.20	85.23%	\$1,110,581,112.75

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded to prime contractors.

breakdown of dollars paid to each ethnicity group of vendors by each department. The KBUs with the most dollars spent on construction are CMUD, Engineering and Property Management, and Aviation. The KBUs with the highest percent of dollars spent with M/WBEs are Business Support Services and Police.

4.3.5 Analyses of Bid Data

Exhibits 4-21 and **4-22** show bid data that MGT collected from City project files. **Exhibit 4-21** illustrates the number and percentage of bids submitted over the study period. The reader is reminded that the number of bids analyzed is not inclusive of all projects where bids might have been submitted. The bid data analyzed are for those projects where bid data information could be located.

M/WBEs submitted 22 percent (240 bids) of the total construction bids submitted over the study period and won 28 percent (47 contracts) of these bids.

The dollar value of bids won for M/WBEs as shown in **Exhibit 4-21** was 22.6 percent of overall dollars analyzed. The overall dollar value awarded to M/WBEs for Construction services was \$35.9 million, or 47 awards. Of the data analyzed, nonminority firms submitted over 77 percent of the bids and were successful approximately 72 percent of the time. African American firms were the most successful minority firms, being awarded 13.94 percent of the contracts awarded, which translated into 13.95 percent of the awarded dollars. Overall, nonminority firms were awarded nearly \$124 million in contracts, or 77 percent of the total award dollars analyzed.

Exhibit 4-22 shows the number of bids submitted for projects of various dollar sizes. The data show that as the project value increases, the number of bids submitted by M/WBEs decreases. The chart in **Exhibit 4-23** clearly represents this trend in a visual format. More than 80 percent of the bids submitted for construction projects greater than \$500,000 are by nonminority owned firms. M/WBEs have submitted a higher percentage of bids on contracts less than \$250,000 than the larger dollar contracts.

**EXHIBIT 4-21
CITY OF CHARLOTTE
ANALYSIS OF BID DATA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

Bidder Analyses

Construction Bidders	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
Number of Bids Submitted	122	11.40%	0	0.00%	5	0.47%	1	0.09%	112	10.47%	240	22.43%	830	77.57%	1,070
Number of Individual Bidders	11	7.38%	0	0.00%	3	2.01%	1	0.67%	14	9.40%	29	19.46%	120	80.54%	149
Number of Bidded Contracts Awarded	23	13.94%	0	0.00%	1	0.61%	1	0.61%	22	13.33%	47	28.48%	118	71.52%	165
Dollar Amount of Bidded Contract	\$22,249,755.75	13.95%	\$0.00	0.00%	\$65,537.85	0.04%	\$1,139,141.65	0.71%	\$12,541,172.80	7.86%	\$35,995,608.05	22.57%	123,512,674.11	77.43%	\$159,508,282.16

Source: City of Charlotte bid tabulations from calendar years 1998 through 2002.

Note: The number of bids shown in the tables is not inclusive of all projects for which bids were submitted during the study period. The data shown above represent only those projects on which bid information was available in the files reviewed.

**EXHIBIT 4-22
CITY OF CHARLOTTE
ANALYSIS OF BID DATA BY DOLLAR THRESHOLDS
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

Number and Percent of Bids Submitted

Thresholds Bid Amount	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Bids Submitted
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
Less than or Equal to \$29,999	5	31.25%	0	0.00%	0	0.00%	0	0.00%	2	12.50%	7	43.75%	9	56.25%	16
Between \$30,000 and \$250,000	39	22.16%	0	0.00%	5	2.84%	0	0.00%	15	8.52%	59	33.52%	117	66.48%	176
Between \$250,001 and \$500,000	24	13.19%	0	0.00%	0	0.00%	0	0.00%	21	11.54%	45	24.73%	137	75.27%	182
Between \$500,001 and \$1 million	31	7.81%	0	0.00%	0	0.00%	0	0.00%	44	11.08%	75	18.89%	322	81.11%	397
Greater than \$1 million	23	7.69%	0	0.00%	0	0.00%	1	0.33%	30	10.03%	54	18.06%	245	81.94%	299
Total	122	11.40%	0	0.00%	5	0.47%	1	0.09%	112	10.47%	240	22.43%	830	77.57%	1070

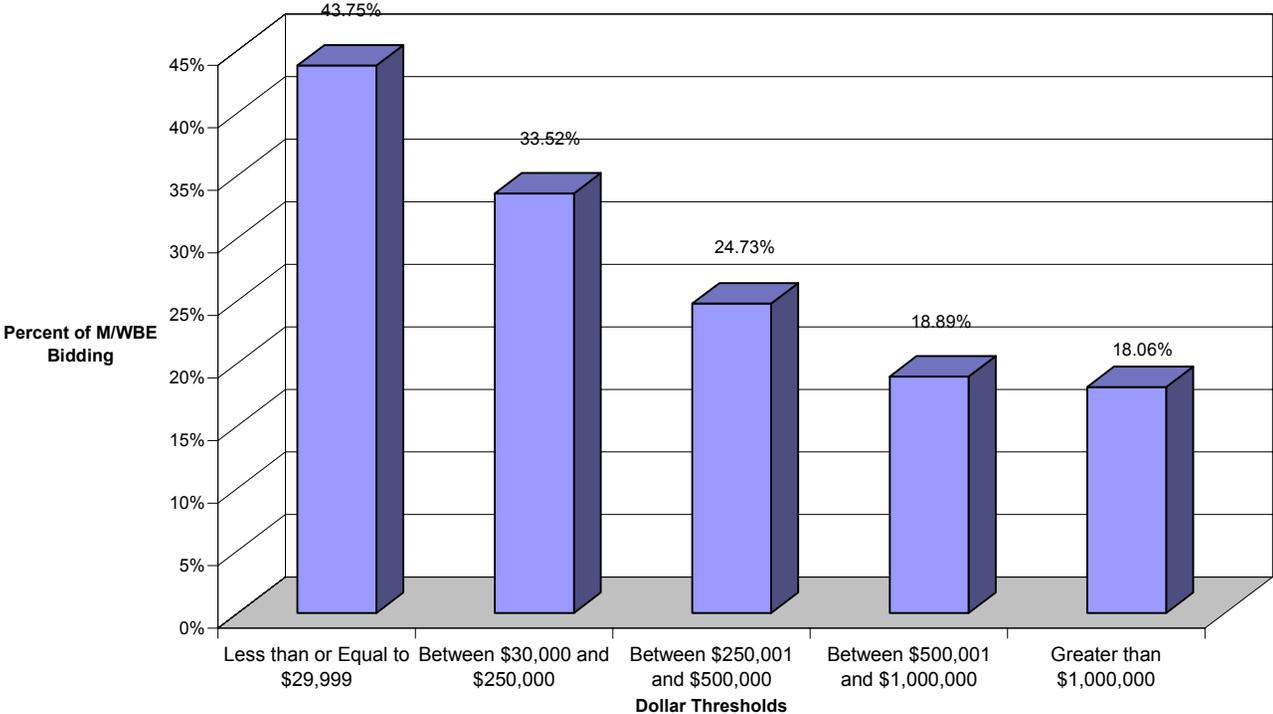
Sources: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total bids submitted by prime contractors.

**EXHIBIT 4-23
CITY OF CHARLOTTE
ANALYSIS OF BID DATA OF M/WBE FIRMS
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Bidding Activity

Percent of M/WBE Bidding by Dollar Threshold



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

4.3.6 Additional Availability Data

MGT analyzed other sources of availability data for comparison purposes. These include both the census availability and the construction bidders as availability. The analyses are located in the appendices; however, it is worth summarizing the results here in the chapter.

Appendix J, Exhibit J-1, shows the availability of construction vendors using those firms that have placed bids for construction projects greater than \$30,000. Although bidder data are limited in volume, the percentage of available firms is similar to that of our vendor availability as was used in the chapter previously. Based on bidder availability, M/WBEs make up approximately 19 percent of the construction firms.

When MGT compared the availability percentages based on census data, a similar outcome resulted. Census availability and analyses are shown in **Appendix J. Exhibit J-3** shows the prime availability based on census data. To determine prime and subcontractors using census data, the vendors were separated as follows:

- SIC codes 15 and 16 – classified as prime contractors.
- SIC codes 15, 16 and 17 – classified as subcontractors

Using census data, the availability percentages for M/WBEs were about 11 percent for primes. Disparity ratios are also shown in Appendix J for comparison purposes, using the same utilization data that were used for the main analyses in this chapter (**Exhibit J-4**).

4.3.7 Decomposition of Construction Work Type Transactions

To provide further detail of where the City of Charlotte's dollars are being spent, MGT divided the procurements into smaller, more descriptive categories. The construction work type was decomposed into three smaller work types: heavy construction, building construction, and special trade construction.

4.3.7.1 Heavy Construction

The dollar utilization of heavy construction prime contractors shows that M/WBEs received 17 percent (\$130 million) of the heavy construction dollars awarded (**Exhibit 4-24**). Nonminority women had the largest of the M/WBEs with eight percent of the total and Asian American firms had the second highest with almost five percent of the total dollars. As can be seen in **Exhibit 4-25**, 31 M/WBE firms received 220 POs during the study period. The availability of heavy construction firms based on vendor data is shown in **Exhibit 4-26**. M/WBEs account for 11 percent of the available heavy construction firms with nonminority women and Asian American firms being the two largest with 17 and five firms, respectively. **Appendix K** shows the availability of heavy construction firms based on census data. Census data shows a higher percent of available M/WBEs 17.51 percent, with nonminority women and African Americans being the largest groups available (13.56% and 2.26% respectively).

4.3.7.2 Building Construction

The dollar utilization of building construction prime contractors shows that M/WBEs received 3 percent (\$6.7 million) of the building construction dollars awarded (**Exhibit 4-27**). Nonminority women had the largest dollar utilization of the M/WBEs with 2.44 percent of the total and African American firms had the second highest with 0.39 percent of the total dollars. As can be seen in **Exhibit 4-28**, 13 M/WBE firms received 35 POs during the study period. The availability of building construction firms based on vendor data is shown in **Exhibit 4-29**. M/WBEs account for 2.72 percent of the available building construction firms with nonminority women and Asian American firms being the two largest with 17 and eight firms, respectively. **Appendix K** shows the availability of building construction firms based on census data. Census data shows a higher percent of available M/WBEs 10.19 percent, with nonminority women and African Americans being the largest groups available (5.80% and 2.62% respectively).

**EXHIBIT 4-24
HEAVY CONSTRUCTION PRIME CONTRACTORS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$5,876,987.69	4.96%	\$0.00	0.00%	\$8,919,895.00	7.52%	\$2,721,477.00	2.30%	\$11,937,622.64	10.07%	\$29,455,982.33	24.84%	\$89,123,778.66	75.16%	\$118,579,760.99
1999	\$5,730,859.89	3.71%	\$0.00	0.00%	\$6,116,744.92	3.96%	\$0.00	0.00%	\$8,476,443.60	5.49%	\$20,324,048.41	13.16%	\$134,101,161.00	86.84%	\$154,425,209.41
2000	\$6,908,959.90	4.08%	\$0.00	0.00%	\$3,679,547.62	2.17%	\$0.00	0.00%	\$10,993,342.69	6.49%	\$21,581,850.21	12.73%	\$147,900,826.50	87.27%	\$169,482,676.71
2001	\$4,938,637.90	3.00%	\$0.00	0.00%	\$6,504,470.43	3.95%	\$0.00	0.00%	\$16,763,403.86	10.19%	\$28,206,512.19	17.14%	\$136,338,973.30	82.86%	\$164,545,485.49
2002	\$4,417,425.51	2.89%	\$0.00	0.00%	\$12,011,739.40	7.85%	\$0.00	0.00%	\$14,485,227.21	9.47%	\$30,914,392.12	20.21%	\$122,055,138.65	79.79%	\$152,969,530.77
Total	\$27,872,870.89	3.67%	\$0.00	0.00%	\$37,232,397.37	4.90%	\$2,721,477.00	0.36%	\$62,656,040.00	8.24%	\$130,482,785.26	17.17%	\$629,519,878.11	82.83%	\$760,002,663.37

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-25
HEAVY CONSTRUCTION PRIME CONTRACTORS UTILIZATION # OF POs AND UNIQUE VENDORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Number of PO's Let by Race/Ethnicity/Gender Classification

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	9	7.83%	0	0.00%	7	6.09%	1	0.87%	11	9.57%	28	24.35%	87	75.65%	115
1999	9	5.70%	0	0.00%	9	5.70%	0	0.00%	15	9.49%	33	20.89%	125	79.11%	158
2000	13	8.39%	0	0.00%	8	5.16%	0	0.00%	25	16.13%	46	29.68%	109	70.32%	155
2001	18	8.82%	0	0.00%	17	8.33%	0	0.00%	18	8.82%	53	25.98%	151	74.02%	204
2002	11	5.53%	0	0.00%	22	11.06%	0	0.00%	27	13.57%	60	30.15%	139	69.85%	199
Total PO's	60	7.22%	0	0.00%	63	7.58%	1	0.12%	96	11.55%	220	26.47%	611	73.53%	831

Number of Vendors by Race/Ethnicity/Gender Classification

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	
1998	3	6.98%	0	0.00%	2	4.65%	1	2.33%	3	6.98%	9	20.93%	34	79.07%	43
1999	3	5.17%	0	0.00%	2	3.45%	0	0.00%	6	10.34%	11	18.97%	47	81.03%	58
2000	7	10.45%	0	0.00%	2	2.99%	0	0.00%	10	14.93%	19	28.36%	48	71.64%	67
2001	7	9.72%	0	0.00%	3	4.17%	0	0.00%	6	8.33%	16	22.22%	56	77.78%	72
2002	5	8.77%	0	0.00%	3	5.26%	0	0.00%	9	15.79%	17	29.82%	40	70.18%	57
Total Unique Vendors Over Five Years ³	13	8.97%	0	0.00%	3	2.07%	1	0.69%	14	9.66%	31	21.38%	114	78.62%	145

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of Total PO's.

² Percentage of Total Vendors.

³ The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

**EXHIBIT 4-26
HEAVY CONSTRUCTION PRIME CONTRACTORS AVAILABLE
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	3	1.09%	1	0.41%	5	2.07%	2	0.83%	17	7.03%	28	11.43%	214	88.57%	242

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-27
BUILDING CONSTRUCTION PRIME CONTRACTORS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$170,880.33	0.85%	\$170,880.33	0.85%	\$20,006,120.12	99.15%	\$20,177,000.45
1999	\$310,792.13	0.60%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,402,615.42	2.71%	\$1,713,407.55	3.31%	\$49,974,264.72	96.69%	\$51,687,672.27
2000	\$58,500.00	0.10%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$350,914.72	0.62%	\$409,414.72	0.72%	\$56,619,116.32	99.28%	\$57,028,531.04
2001	\$350,430.09	0.56%	\$0.00	0.00%	\$242,915.00	0.39%	\$0.00	0.00%	\$542,847.95	0.87%	\$1,136,193.04	1.83%	\$61,018,035.53	98.17%	\$62,154,228.57
2002	\$152,353.65	0.47%	\$149,213.42	0.46%	\$0.00	0.00%	\$0.00	0.00%	\$2,978,385.39	9.16%	\$3,279,952.46	10.09%	\$29,235,074.87	89.91%	\$32,515,027.33
Total	\$872,075.87	0.39%	\$149,213.42	0.07%	\$242,915.00	0.11%	\$0.00	0.00%	\$5,445,643.81	2.44%	\$6,709,848.10	3.00%	\$216,852,611.56	97.00%	\$223,562,459.66

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-28
BUILDING CONSTRUCTION PRIME CONTRACTORS UTILIZATION # OF POs AND UNIQUE VENDORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	4.17%	1	4.17%	23	95.83%	24
1999	2	5.71%	0	0.00%	0	0.00%	0	0.00%	4	11.43%	6	17.14%	29	82.86%	35
2000	1	2.44%	0	0.00%	0	0.00%	0	0.00%	3	7.32%	4	9.76%	37	90.24%	41
2001	3	5.56%	0	0.00%	3	5.56%	0	0.00%	8	14.81%	14	25.93%	40	74.07%	54
2002	1	2.44%	2	4.88%	0	0.00%	0	0.00%	7	17.07%	10	24.39%	31	75.61%	41
Total PO's	7	3.59%	2	1.03%	3	1.54%	0	0.00%	23	11.79%	35	17.95%	160	82.05%	195

Number of Vendors by Race/Ethnicity/Gender Classification

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	
1998	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	5.00%	1	5.00%	19	95.00%	20
1999	2	8.33%	0	0.00%	0	0.00%	0	0.00%	2	8.33%	4	16.67%	20	83.33%	24
2000	1	3.33%	0	0.00%	0	0.00%	0	0.00%	2	6.67%	3	10.00%	27	90.00%	30
2001	2	5.88%	0	0.00%	2	5.88%	0	0.00%	4	11.76%	8	23.53%	26	76.47%	34
2002	1	4.00%	1	4.00%	0	0.00%	0	0.00%	2	8.00%	4	16.00%	21	84.00%	25
Total Unique Vendors Over Five Years ³	3	3.19%	1	1.06%	2	2.13%	0	0.00%	7	7.45%	13	13.83%	81	86.17%	94

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of Total PO's.

² Percentage of Total Vendors.

³ The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

**EXHIBIT 4-29
BUILDING CONSTRUCTION PRIME CONTRACTORS AVAILABLE
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	2	0.20%	1	0.09%	8	0.72%	2	0.18%	18	1.57%	31	2.77%	1,082	97.23%	1,113

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

4.3.7.3 Specialty Trades Construction

The dollar utilization of specialty trade construction prime contractors shows that M/WBEs received 21 percent (\$26.8 million) of the specialty trade construction dollars awarded (**Exhibit 4-30**). Asian American firms had the largest of the M/WBEs with 9.60 percent of the total and African American firms had the second highest with 6.42 percent of the total dollars. As can be seen in **Exhibit 4-31**, 35 M/WBE firms received 83 POs during the study period. The availability of specialty trade construction firms based on vendor data is shown in **Exhibit 4-32**. M/WBEs account for 14.50 percent of the available specialty trade construction firms with nonminority women and Native American firms being the two largest with 41 and 10 firms, respectively. **Appendix K** shows the availability of specialty trade construction firms based on census data. Census data shows a higher percent of available M/WBEs 19.09 percent, with nonminority women and African Americans being the largest groups available (8.57% and 5.08% respectively).

4.3.7.4 Comparison of Utilization and Availability

A comparison of the utilization and availability for Construction greater than \$30,000 and the three decomposed types of construction is shown in **Exhibit 4-33**. While the overall utilization of M/WBEs for construction greater than \$30,000 is 14.77 percent, this varies considerably when decomposed into the three construction areas. Building construction has the lowest utilization of M/WBEs with three percent, while heavy construction has a M/WBE utilization of 17.17 percent and specialty trades construction has a M/WBE utilization of 21.11 percent. Heavy construction accounts for 68 percent of the total dollars spent in construction, while building construction accounts for 20 percent and specialty trades accounts for 11 percent.

The availability results are similar. Overall, there are 5.14 percent M/WBE availability, while building construction is the lowest with 2.72 percent M/WBE availability, heavy construction is 10.78 percent M/WBE availability and specialty trades

**EXHIBIT 4-30
SPECIAL TRADES CONSTRUCTION PRIME CONTRACTORS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$988,679.15	5.30%	\$0.00	0.00%	\$2,044,628.35	10.95%	\$326,610.00	1.75%	\$1,453,201.44	7.79%	\$4,813,118.94	25.79%	\$13,851,988.54	74.21%	\$18,665,107.48
1999	\$189,836.79	1.27%	\$299,194.00	2.01%	\$627,890.38	4.21%	\$0.00	0.00%	\$886,759.47	5.94%	\$2,003,680.64	13.43%	\$12,913,190.40	86.57%	\$14,916,871.04
2000	\$1,992,536.67	4.82%	\$0.00	0.00%	\$6,256,296.38	15.14%	\$0.00	0.00%	\$887,236.87	2.15%	\$9,136,069.92	22.11%	\$32,177,537.93	77.89%	\$41,313,607.85
2001	\$590,392.87	2.10%	\$0.00	0.00%	\$1,757,294.11	6.25%	\$0.00	0.00%	\$1,471,955.81	5.24%	\$3,819,642.79	13.59%	\$24,293,825.06	86.41%	\$28,113,467.85
2002	\$4,396,696.10	18.31%	\$0.00	0.00%	\$1,507,404.74	6.28%	\$64,053.37	0.27%	\$1,069,450.69	4.45%	\$7,037,604.90	29.31%	\$16,969,330.60	70.69%	\$24,006,935.50
Total	\$8,158,141.58	6.42%	\$299,194.00	0.24%	\$12,193,513.96	9.60%	\$390,663.37	0.31%	\$5,768,604.28	4.54%	\$26,810,117.19	21.11%	\$100,205,872.53	78.89%	\$127,015,989.72

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-31
SPECIAL TRADES CONSTRUCTION PRIME CONTRACTORS UTILIZATION # OF POs AND UNIQUE VENDORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Number of PO's Let by Race/Ethnicity/Gender Classification

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	5	6.94%	0	0.00%	4	5.56%	1	1.39%	5	6.94%	15	20.83%	57	79.17%	72
1999	1	1.43%	1	1.43%	3	4.29%	0	0.00%	6	8.57%	11	15.71%	59	84.29%	70
2000	5	5.56%	0	0.00%	6	6.67%	0	0.00%	6	6.67%	17	18.89%	73	81.11%	90
2001	4	4.55%	0	0.00%	2	2.27%	0	0.00%	9	10.23%	15	17.05%	73	82.95%	88
2002	7	7.87%	0	0.00%	5	5.62%	1	1.12%	12	13.48%	25	28.09%	64	71.91%	89
Total PO's	22	5.38%	1	0.24%	20	4.89%	2	0.49%	38	9.29%	83	20.29%	326	79.71%	409

Number of Vendors by Race/Ethnicity/Gender Classification

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	
1998	4	8.16%	0	0.00%	2	4.08%	1	2.04%	5	10.20%	12	24.49%	37	75.51%	49
1999	1	1.72%	1	1.72%	2	3.45%	0	0.00%	6	10.34%	10	17.24%	48	82.76%	58
2000	3	4.69%	0	0.00%	2	3.13%	0	0.00%	6	9.38%	11	17.19%	53	82.81%	64
2001	3	4.76%	0	0.00%	1	1.59%	0	0.00%	6	9.52%	10	15.87%	53	84.13%	63
2002	4	6.78%	0	0.00%	3	5.08%	1	1.69%	8	13.56%	16	27.12%	43	72.88%	59
Total Unique Vendors Over Five Years ³	10	5.46%	1	0.55%	4	2.19%	1	0.55%	19	10.38%	35	19.13%	148	80.87%	183

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of Total POs.

² Percentage of Total Vendors.

³ The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

**EXHIBIT 4-32
SPECIAL TRADES CONSTRUCTION PRIME CONTRACTORS AVAILABLE
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	6	1.28%	3	0.55%	7	1.53%	10	2.18%	41	8.96%	66	14.50%	391	85.50%	458

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

construction is 11.84 percent M/WBE available. This is due to the higher of number of building construction firms available and their ethnicity and gender than the firms available in heavy construction and specialty trades.

**EXHIBIT 4-33
COMPARISON OF UTILIZATION AND AVAILABILITY
TOTAL CONSTRUCTION GREATER THAT \$30,000, HEAVY CONSTRUCTION,
BUILDING CONSTRUCTION, AND SPECIALTY TRADE CONSTRUCTION
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

	% of PO's/Payments Dollars ¹	% of Available Firms ²
Total Construction Greater Than \$30,000		
African Americans	3.32%	0.95%
Hispanic Americans	0.04%	0.34%
Asian Americans	4.47%	0.62%
Native Americans	0.28%	0.40%
Nonminority Women	6.65%	2.76%
Nonminority Firms	85.23%	94.94%
Heavy Construction		
African Americans	3.67%	1.09%
Hispanic Americans	0.00%	0.41%
Asian Americans	4.90%	2.07%
Native Americans	0.36%	0.83%
Nonminority Women	0.36%	7.03%
Nonminority Firms	82.83%	88.57%
Building Construction		
African Americans	0.39%	0.20%
Hispanic Americans	0.07%	0.09%
Asian Americans	0.11%	0.72%
Native Americans	0.00%	0.18%
Nonminority Women	2.44%	1.57%
Nonminority Firms	97.00%	97.23%
Specialty Trade Construction		
African Americans	6.42%	1.28%
Hispanic Americans	0.24%	0.55%
Asian Americans	9.60%	1.53%
Native Americans	0.31%	2.18%
Nonminority Women	4.54%	8.96%
Nonminority Firms	78.89%	85.50%

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown.

² The percentage of available contractors is taken from the availability exhibit previously shown.

4.4 Architecture and Engineering

This section presents the City's relevant market area analysis for Architecture and Engineering contract awards and payments, and the utilization and availability analysis of M/WBEs and non-M/WBEs as Architecture and Engineering consultants and subconsultants.

4.4.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determine by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

The City spent approximately \$116 million on Architecture and Engineering contracts over the five-year study period. **Exhibit 4-34** shows the location of firms awarded Architecture and Engineering contracts by county of domicile and dollar amount. The relevant market area for the City's Architecture and Engineering contract awards consists of nine counties. Approximately \$104 million (89.8%) of the \$116 million total expenditures for Architecture and Engineering services were to firms in the relevant market area.

**EXHIBIT 4-34
ARCHITECTURE AND ENGINEERING
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of Contracts	% of Contracts	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% ²
MECKLENBURG, NC	449	81.79%	97	74.62%	\$66,361,822.17	57.02%	57.02%
WAKE, NC	22	4.01%	6	4.62%	\$18,171,710.48	15.61%	72.63%
RICHLAND, SC	4	0.73%	2	1.54%	\$930,096.00	0.80%	73.43%
FAIRFAX, VA	2	0.36%	2	1.54%	\$354,207.00	0.30%	73.73%
FULTON, GA	2	0.36%	2	1.54%	\$166,800.00	0.14%	73.88%
DALLAS, TX	2	0.36%	2	1.54%	\$145,500.00	0.13%	74.00%
GWINNETT, GA	5	0.91%	2	1.54%	\$137,250.00	0.12%	74.12%
DURHAM, NC	3	0.55%	2	1.54%	\$53,690.00	0.05%	74.17%
RANDOLPH, NC	9	1.64%	1	0.77%	\$18,178,359.00	15.62%	89.78%
RELEVANT M.A. TOTAL	498	90.71%	116	89.23%	\$104,499,434.65	89.78%	N/A
NEW HANOVER, NC	11	2.00%	1	0.77%	\$5,999,753.00	5.15%	94.94%
RAMSEY, MN	3	0.55%	1	0.77%	\$2,054,021.46	1.76%	96.70%
COOK, IL	17	3.10%	1	0.77%	\$1,547,388.03	1.33%	98.03%
JONES, MS	1	0.18%	1	0.77%	\$721,287.00	0.62%	98.65%
DUVAL, FL	4	0.73%	1	0.77%	\$643,380.29	0.55%	99.21%
SAN FRANCISCO, CA	3	0.55%	1	0.77%	\$193,206.94	0.17%	99.37%
HENNEPIN, MN	2	0.36%	1	0.77%	\$170,671.74	0.15%	99.52%
GUILFORD, NC	3	0.55%	1	0.77%	\$155,500.00	0.13%	99.65%
HARRIS, TX	2	0.36%	1	0.77%	\$135,995.00	0.12%	99.77%
GLOUCESTER, NJ	1	0.18%	1	0.77%	\$113,914.50	0.10%	99.87%
CHESTER, PA	1	0.18%	1	0.77%	\$96,442.50	0.08%	99.95%
GASTON, NC	1	0.18%	1	0.77%	\$29,538.89	0.03%	99.98%
ORANGE, FL	1	0.18%	1	0.77%	\$23,500.00	0.02%	100.00%
SUFFOLK, MA	1	0.18%	1	0.77%	\$5,000.00	0.00%	100.00%
Total	549	100.00%	130	100.00%	\$116,389,034.00	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

A total of 498 contracts were awarded to 116 firms within the relevant market area.

Overall, 549 contracts were awarded to 130 individual firms.

4.4.2 Utilization Analysis

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars

awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

MGT analyzed the Architecture and Engineering dollars awarded by the City to M/WBE and non-M/WBE prime consultants and subconsultants located in the relevant market area. The utilization analysis results are presented by calendar year, dollar amount of the PO/payment, number of POs awarded, and individual firms according to race/ethnicity/gender classifications.

Exhibit 4-35 presents the utilization analysis of Architecture and Engineering prime consultants in the City's relevant market area. M/WBEs received just over 10 percent of the Architecture and Engineering dollars awarded to consultants in the relevant market area. Approximately \$105 million were spent by the City for Architecture and Engineering in the relevant market area, of which approximately \$10.4 million were awarded to M/WBEs, as shown in **Exhibit 4-35**. Nonminority-owned firms received more than \$94 million of City Architecture and Engineering awards. During calendar year 2002, M/WBE firms received the least amount of money when compared to the other years, with 6.7 percent of the dollars for that year. The list of Architecture and Engineering contracts is shown in **Appendix L**.

The utilization of city certified firms in Architecture and Engineering is shown in **Appendix F, Exhibits F-5 and F-6**.

Exhibits 4-36 and 4-37 show the utilization by the number of POs and the number of Architecture and Engineering firms used during the study period. Our analysis shows that 306 of the 382 contract awards went to nonminority firms. Furthermore, 18 out of

**EXHIBIT 4-35
ARCHITECTURAL AND ENGINEERING
UTILIZATION ANALYSIS OF PRIME CONSULTANTS IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$0.00	0.00%	\$0.00	0.00%	\$650,000.00	5.68%	\$730,423.42	6.38%	\$290,199.00	2.53%	\$1,670,622.42	14.59%	\$9,780,890.55	85.41%	\$11,451,512.97
1999	\$66,512.10	0.59%	\$25,338.54	0.23%	\$313,166.80	2.79%	\$48,541.00	0.43%	\$966,879.00	8.61%	\$1,420,437.44	12.65%	\$9,807,535.60	87.35%	\$11,227,973.04
2000	\$0.00	0.00%	\$310,000.00	0.56%	\$46,850.00	0.09%	\$1,857,265.53	3.38%	\$2,385,600.00	4.35%	\$4,599,715.53	8.38%	\$50,291,180.46	91.62%	\$54,890,895.99
2001	\$33,190.00	0.31%	\$90,000.00	0.85%	\$300,000.00	2.83%	\$0.00	0.00%	\$1,278,416.00	12.05%	\$1,701,606.00	16.04%	\$8,909,404.51	83.96%	\$10,611,010.51
2002	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$17,745.73	0.11%	\$1,073,900.00	6.58%	\$1,091,645.73	6.69%	\$15,226,396.41	93.31%	\$16,318,042.14
Total	\$99,702.10	0.10%	\$425,338.54	0.41%	\$1,310,016.80	1.25%	\$2,653,975.68	2.54%	\$5,994,994.00	5.74%	\$10,484,027.12	10.03%	\$94,015,407.53	89.97%	\$104,499,434.65

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-36
ARCHITECTURE AND ENGINEERING
NUMBER OF CONTRACTS AWARDED
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Pos #
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	0	0.00%	0	0.00%	1	1.96%	3	5.88%	3	5.88%	7	13.73%	44	86.27%	51
1999	4	4.65%	10	11.63%	3	3.49%	1	1.16%	9	10.47%	27	31.40%	59	68.60%	86
2000	0	0.00%	6	6.52%	2	2.17%	4	4.35%	6	6.52%	18	19.57%	74	80.43%	92
2001	1	1.41%	1	1.41%	1	1.41%	0	0.00%	8	11.27%	11	15.49%	60	84.51%	71
2002	0	0.00%	0	0.00%	0	0.00%	1	1.22%	12	14.63%	13	15.85%	69	84.15%	82
Total Contracts	5	1.31%	17	4.45%	7	1.83%	9	2.36%	38	9.95%	76	19.90%	306	80.10%	382

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-37
ARCHITECTURE AND ENGINEERING
NUMBER OF INDIVIDUAL PRIME CONSULTANTS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	0	0.00%	0	0.00%	1	2.94%	2	5.88%	3	8.82%	6	17.65%	28	82.35%	34
1999	3	6.82%	1	2.27%	2	4.55%	1	2.27%	5	11.36%	12	27.27%	32	72.73%	44
2000	0	0.00%	1	2.22%	1	2.22%	1	2.22%	5	11.11%	8	17.78%	37	82.22%	45
2001	1	2.08%	1	2.08%	1	2.08%	0	0.00%	5	10.42%	8	16.67%	40	83.33%	48
2002	0	0.00%	0	0.00%	0	0.00%	1	2.38%	5	11.90%	6	14.29%	36	85.71%	42
Total Unique Vendors Over Five Years ²	4	3.45%	1	0.86%	2	1.72%	2	1.72%	9	7.76%	18	15.52%	98	84.48%	116

Sources: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percent of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

116 total unique firms used by the City for Architecture and Engineering contracts were M/WBEs. There were more than two times as many nonminority women firms utilized for Architecture and Engineering contracts than any other M/WBE category.

MGT further analyzed the utilization of M/WBE Architecture and Engineering firms by examining Architecture and Engineering awards in specific dollar ranges. The established ranges were:

- contracts \$250,000 and under;
- contracts between \$250,001 and \$500,000;
- contracts between \$500,001 and \$1 million; and
- contracts over \$1 million.

POs \$250,000 and Under

The City of Charlotte awarded 306 POs from calendar year 1998 through 2002 on Architecture and Engineering contracts of \$250,000 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-38**. As **Exhibit 4-38** illustrates, M/WBE firms received about 21 percent of the dollars in this category. Nonminority women-owned firms were the most utilized M/WBE category, receiving about 10 percent of the awards. Hispanic American-owned firms were next at approximately 5 percent. Non-M/WBE firms received 79 percent of the purchase order dollars.

POs between \$250,001 and \$500,000

Thirty-one Architecture and Engineering POs between the \$250,001 and \$500,000 range were awarded during the five-year study period. Six went to M/WBE firms, four of which were to nonminority women. No awards were made to African American, Hispanic American, or Native American firms in this dollar category.

**EXHIBIT 4-38
CITY OF CHARLOTTE
UTILIZATION OF ARCHITECTURE AND ENGINEERING CONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Pos Awarded
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
Less than or Equal to \$250,000	5	1.63%	17	5.56%	4	1.31%	6	1.96%	32	10.46%	64	20.92%	242	79.08%	306
Between \$250,001 and \$500,000	0	0.00%	0	0.00%	2	6.45%	0	0.00%	4	12.90%	6	19.35%	25	80.65%	31
Between \$500,001 and \$1million	0	0.00%	0	0.00%	1	3.70%	3	11.11%	1	3.70%	5	18.52%	22	81.48%	27
Greater than \$1 million	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	5.56%	1	5.56%	17	94.44%	18
Total	5	1.31%	17	4.45%	7	1.83%	9	2.36%	38	9.95%	76	19.90%	306	80.10%	382

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total POs awarded to prime contractors.

POs between \$500,001 and \$1 million

Twenty-seven POs were awarded for professional services contracts over \$500,000 and less than \$1 million. Of these, 18 percent went to M/WBE firms, with most going to Native American firms. Nonminority firms were successful with 82 percent of the POs in this threshold.

POs over \$1 million

The City awarded 18 POs of \$1 million or more for Architecture and Engineering in the relevant market area. One of these went to an M/WBE firm, which was to a nonminority women-owned firm. The remaining 94 percent went to nonminority-owned firms.

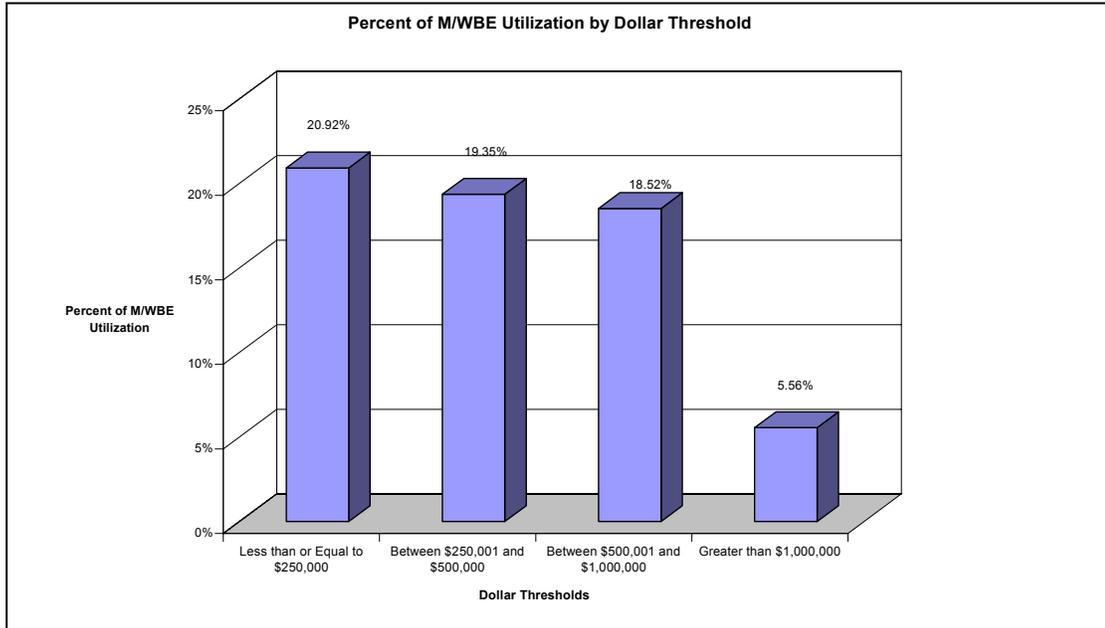
Contract dollar ranges

Exhibit 4-39 shows a graphical comparison of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as contract dollars rose. M/WBE firms were awarded almost 20 percent on Architecture and Engineering contracts for the study period.

Subconsultant Analysis

It should be noted that during the study period, the City required prime contractors to report utilization of M/WBE subcontractors, but not nonminority subcontractors. As a result the data collected does not portray all subcontracts. Verification reports were used to supplement the subcontract data collected. The subcontractor analyses based on verification reports only is shown in **Appendix I**. In addition, payment affidavits were sent to contractors that had payments in 2002. The subconsultant analyses based on affidavits only is shown in **Appendix I**.

**EXHIBIT 4-39
CITY OF CHARLOTTE
UTILIZATION OF M/WBE PRIME ARCHITECTURE AND ENGINEERING CONSULTANTS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

When we compare the percent of total subconsultant dollars awarded to M/WBEs using the three subconsultant analyses, the affect of the incomplete nonminority male subconsultant data is highlighted. Using the full set of subconsultant data (**Exhibit 4-40**), 42.3 percent of subconsultant dollars went to M/WBEs; compared to verification reports (**Exhibit I-2**), 34.23 percent of subconsultant dollars went to M/WBEs, and compared to the payment affidavits (**Exhibit I-4**), 57.8 percent of subconsultant dollars to M/WBEs.

Exhibit 4-40 shows the utilization of subconsultants for Architecture and Engineering contracts. Native American firms were not used on Architecture and Engineering subcontracts. Nonminority women-owned firms were awarded most subcontract dollars of any M/WBE (\$1.4 million) and Hispanic Americans were awarded the second most subcontract dollars (\$560,000). A list of Architecture and Engineering subconsultants analyzed is shown in **Appendix M**.

**EXHIBIT 4-40
ARCHITECTURE AND ENGINEERING
UTILIZATION ANALYSIS OF SUBCONSULTANTS
IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority		Total Sub Dollars Awarded ²
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	
1998	\$3,500.00	0.44%	\$174,177.16	22.03%	\$78,275.00	9.90%	\$0.00	0.00%	\$209,772.16	26.54%	\$465,724.32	58.92%	\$324,764.60	41.08%	\$790,488.92
1999	\$0.00	0.00%	\$17,592.60	5.34%	\$0.00	0.00%	\$0.00	0.00%	\$90,808.00	27.56%	\$108,400.60	32.90%	\$221,066.60	67.10%	\$329,467.20
2000	\$30,242.00	1.27%	\$320,339.72	13.45%	\$0.00	0.00%	\$0.00	0.00%	\$795,274.18	33.40%	\$1,145,855.90	48.12%	\$1,235,161.96	51.88%	\$2,381,017.86
2001	\$26,368.00	12.87%	\$48,222.00	23.53%	\$0.00	0.00%	\$0.00	0.00%	\$36,481.00	17.80%	\$111,071.00	54.20%	\$93,850.00	45.80%	\$204,921.00
2002	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$294,647.21	22.33%	\$294,647.21	22.33%	\$1,025,160.31	77.67%	\$1,319,807.52
Total	\$60,110.00	1.20%	\$560,331.48	11.15%	\$78,275.00	1.56%	\$0.00	0.00%	\$1,426,982.55	28.39%	\$2,125,699.03	42.30%	\$2,900,003.47	57.70%	\$5,025,702.50

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 to 2002.

¹ Percentage of Total Dollars Awarded.

² The Total Dollars Awarded is the actual amount given to all subconsultants.

MGT also analyzed the utilization of M/WBE subconsulting firms by examining contracts in specific dollar ranges. The established ranges for subconsulting follow:

- contracts \$50,000 and under;
- contracts between \$50,001 and \$100,000;
- contracts between \$100,001 and \$250,000; and
- contracts over \$250,000.

Contracts \$50,000 and Under

There were 143 Architecture and Engineering subconsulting contracts between calendar years 1998 and 2002 for \$50,000 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-41**. As **Exhibit 4-41** illustrates, M/WBEs received 58 percent of the subcontracts in this category. Nonminority women-owned firms were the most utilized M/WBEs in this dollar range, receiving 60 subcontracts.

Contracts between \$50,001 and \$100,000

Thirty-nine subcontracts were awarded by primes for Architecture and Engineering services between \$50,001 and \$100,000 in the five-year study period. M/WBEs received 20 subcontracts in this dollar range. Nonminority women firms received the most subcontracts with 11, and Hispanic American firms received 7 subcontracts.

Contracts between \$100,001 and \$250,000

There were eight subcontracts awarded for Architecture and Engineering projects over \$100,000, but less than \$250,000. One of these subcontracts was awarded to a nonminority woman firm.

Contracts over \$250,000

There was one subcontract awarded by primes of \$250,000 or more. The contract went to a nonminority-owned firm.

**EXHIBIT 4-41
CITY OF CHARLOTTE
UTILIZATION OF ARCHITECTURE AND ENGINEERING SUBCONSULTANTS IN RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Contracts Awarded #
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
Less than or Equal to \$50,000	5	3.50%	19	13.29%	0	0.00%	0	0.00%	60	41.96%	84	58.74%	59	41.26%	143
Between \$50,001 and \$100,000	0	0.00%	7	17.95%	2	5.13%	0	0.00%	11	28.21%	20	51.28%	19	48.72%	39
Between \$100,001 and \$250,000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	12.50%	1	12.50%	7	87.50%	8
Greater than \$250,000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	100.00%	1
Total	5	2.62%	26	13.61%	2	1.05%	0	0.00%	72	37.70%	105	54.97%	86	45.03%	191

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of contracts awarded to subconsultants.

Contract dollar ranges

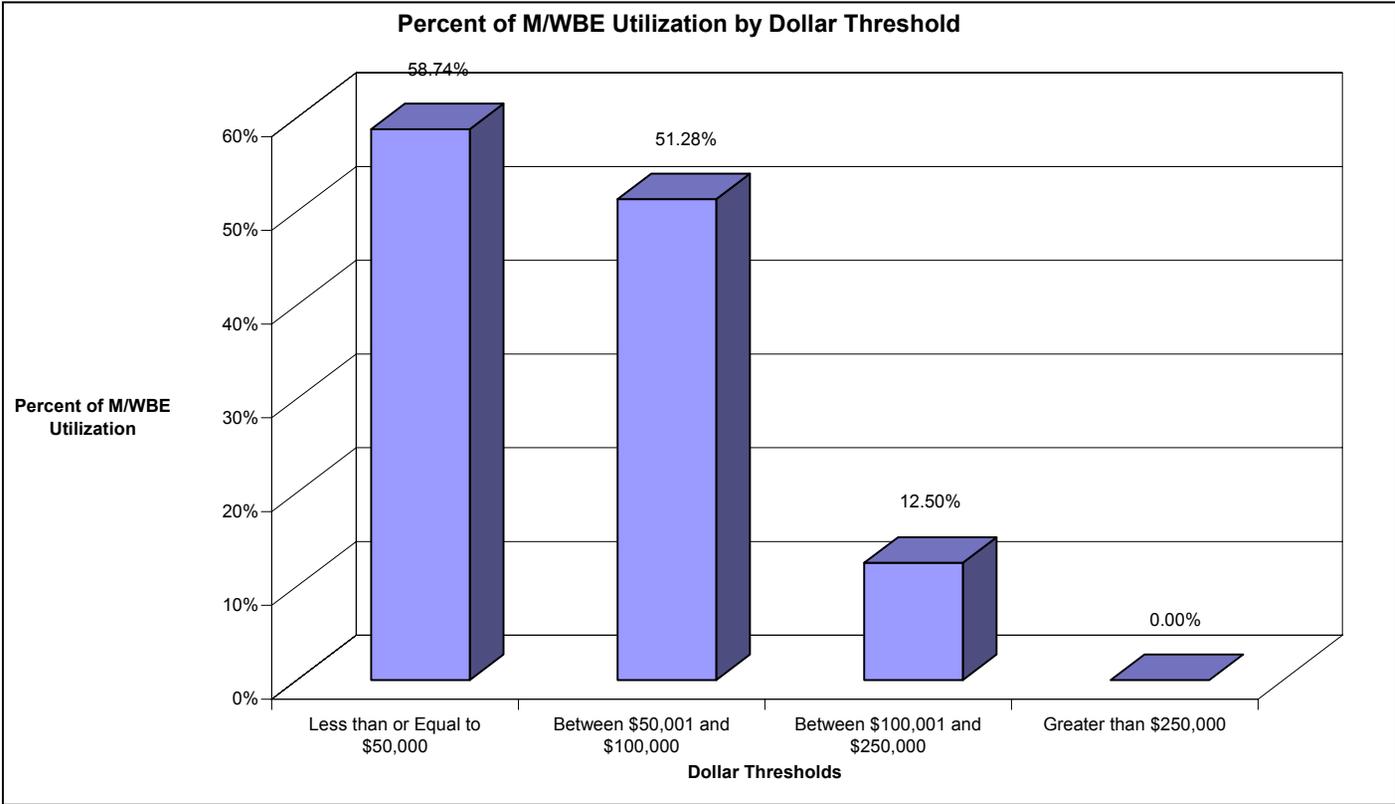
When all contract dollar groups are compared, a similar situation stands out as did the construction subcontractors when it comes to M/WBEs in each of the dollar thresholds. The M/WBE firms were being utilized a great deal for the smaller subcontracts, and the larger the subcontract value, the less frequently M/WBE firms were being utilized. **Exhibit 4-42** shows a comparison graph of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as subcontract dollars rose.

4.4.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for architecture and engineering was derived from those firms (1) have performed prime or subconsultant architecture and engineering work for the City in the past; (2) have submitted qualifications for architecture and engineering work for the City in the past; (3) have registered with any of the City's KBUs as architects and engineers; (4) are registered with any of the agencies listed in section 4.1.3 and it could be determined that they were architects and engineers, or (5) performed or submitted qualifications on architecture and engineering work for Mecklenburg County or Charlotte-Mecklenburg Schools.

All firms that met the qualifications stated above, are considered subconsultants available to perform architecture and engineering work for the City. MGT took the results from the vendor survey to further distinguish available prime contractors. On the survey instrument was a question asking the vendor if he/she had ever performed work as a prime contractor, prime consultant, or supplier on a project in either the public or private sector. If the firm answered "Never," MGT considered these firms as available as a subcontractor only, and not available as a prime. MGT then took the percentage distribution of the returned results, identified those firms that did not respond to the survey, and reduced the prime availability accordingly.

**EXHIBIT 4-42
CITY OF CHARLOTTE
UTILIZATION OF M/WBE ARCHITECTURE AND ENGINEERING SUBCONSULTANTS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

The availability of prime and subconsultants is derived from MGT's master vendor database. **Exhibit 4-43** shows the available Architecture and Engineering consultants that are within the relevant market area. **Exhibit 4-44** shows the available Architecture and Engineering subconsultants within the relevant market area. The exhibits show the distribution of prime consultants and subconsultants by race, ethnicity, and gender.

M/WBEs made up 16 percent of the available Architecture and Engineering prime consultants and 19 percent of subconsultants. The majority of available M/WBE firms for Architecture and Engineering were African American- and nonminority woman-owned firms.

4.4.4 Architecture and Engineering Analysis by City Key Business Unit

This analysis for Architecture and Engineering procurements deals with the utilization dollars by City Department or Key Business Unit (KBU). Each payment made on behalf of a department for an Architecture and Engineering-related purchase was counted in this analysis. In **Exhibit 4-45**, there is a breakdown of dollars paid to each ethnicity group of vendors by each department. The KBUs that spent the largest dollars on Architecture and Engineering contracts were CMUD, Engineering and Property Management, and CATS.

**EXHIBIT 4-43
ARCHITECTURE AND ENGINEERING
AVAILABILITY OF PRIME CONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	15	3.02%	9	1.81%	11	2.29%	2	0.40%	42	8.51%	80	16.03%	418	83.97%	497

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-44
ARCHITECTURE AND ENGINEERING
AVAILABILITY OF SUBCONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	30	5.28%	9	1.58%	17	2.99%	2	0.35%	51	8.98%	109	19.19%	459	80.81%	568

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-45
ARCHITECTURE AND ENGINEERING
UTILIZATION OF PRIME CONSULTANTS BY DEPARTMENT
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Department Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
AVIATION	\$64,702.10	1.14%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64,702.10	1.14%	\$5,632,684.00	98.86%	\$5,697,386.10
BUDGET & EVALUATION	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$41,500.00	65.72%	\$41,500.00	65.72%	\$21,642.00	34.28%	\$63,142.00
BUSINESS SUPPORT SERV	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$81,300.00	100.00%	\$81,300.00
CATS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$22,293,102.76	100.00%	\$22,293,102.76
CMUD	\$0.00	0.00%	\$0.00	0.00%	\$950,006.80	2.24%	\$0.00	0.00%	\$1,063,182.00	2.50%	\$2,013,188.80	4.74%	\$40,484,569.23	95.26%	\$42,497,758.03
ENGINEERING & PROPERT	\$0.00	0.00%	\$423,273.76	1.39%	\$360,010.00	1.18%	\$2,623,551.26	8.62%	\$4,802,112.00	15.78%	\$8,208,947.02	26.97%	\$22,229,706.81	73.03%	\$30,438,653.83
NEIGHBORHOOD DEVELOP	\$25,000.00	25.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$75,000.00	75.00%	\$100,000.00	100.00%	\$0.00	0.00%	\$100,000.00
PLANNING COMMISSION	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,200.00	5.00%	\$13,200.00	5.00%	\$251,063.00	95.00%	\$264,263.00
POLICE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$336,000.00	100.00%	\$336,000.00
TRANSPORTATION	\$0.00	0.00%	\$2,064.78	0.08%	\$0.00	0.00%	\$30,424.42	1.25%	\$0.00	0.00%	\$32,489.20	1.34%	\$2,397,159.73	98.66%	\$2,429,648.93
UNKNOWN	\$10,000.00	3.35%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,000.00	3.35%	\$288,180.00	96.65%	\$298,180.00
Total	\$99,702.10	0.10%	\$425,338.54	0.41%	\$1,310,016.80	1.25%	\$2,653,975.68	2.54%	\$5,994,994.00	5.74%	\$10,484,027.12	10.03%	\$94,015,407.53	89.97%	\$104,499,434.65

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percent of total dollars awarded annually to prime contractors.

4.4.5 Architecture and Engineering Decomposition

MGT was able to further break down the payments to vendors for architecture and engineering services into two categories; architecture and engineering and professional/technical services. The utilization analyses, as well as the total number of available city certified M/WBE firms is shown in **Exhibit 4-46**. It is very difficult to break out architecture from engineering because most firms will do some of both. Based on the account code we decomposed this into two components, Architecture and Engineering and Professional and Technical. As shown in **Exhibit 4-46** the majority of the dollars were in architecture and engineering, with M/WBEs receiving 10 percent of the dollars awarded. All of the professional and technical were awarded to nonminority male firms. **Exhibit 4-47** shows the number of POs awarded – M/WBEs received 15 percent of the POs awarded.

4.5 Professional Services

This section presents the City's relevant market area analysis for Professional Services, and the utilization and availability analysis of M/WBEs and non-M/WBEs as Professional Services consultants and subconsultants.

4.5.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determine by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

**EXHIBIT 4-46
A & E PRIME CONSULTANTS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
A & E	\$99,702.10	0.10%	\$425,338.54	0.41%	\$1,310,016.80	1.26%	\$2,653,975.68	2.56%	\$5,994,994.00	5.77%	\$10,484,027.12	10.09%	\$93,370,107.29	89.91%	\$103,854,134.41
PROF & TECH	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$645,300.24	100.00%	\$645,300.24
Total	\$99,702.10	0.10%	\$425,338.54	0.41%	\$1,310,016.80	1.25%	\$2,653,975.68	2.54%	\$5,994,994.00	5.74%	\$10,484,027.12	10.03%	\$94,015,407.53	89.97%	\$104,499,434.65

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-47
PROFESSIONAL SERVICES PRIME CONSULTANTS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
NOT CLASSIFIED	\$48,500.00	0.96%	\$0.00	0.00%	\$149,900.00	2.97%	\$42,475.25	0.84%	\$978,750.00	19.42%	\$1,219,625.25	24.20%	\$3,819,637.14	75.80%	\$5,039,262.39
ACCT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$221,702.80	100.00%	\$221,702.80
ADV	\$191,380.06	4.80%	\$0.00	0.00%	\$0.00	0.00%	\$1,875.00	0.05%	\$1,311,247.52	32.92%	\$1,504,502.58	37.77%	\$2,479,010.46	62.23%	\$3,983,513.04
LAB TEST	\$0.00	0.00%	\$0.00	0.00%	\$705.00	0.08%	\$0.00	0.00%	\$693,623.24	82.62%	\$694,328.24	82.71%	\$145,195.42	17.29%	\$839,523.66
LEGAL	\$1,500.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64,054.33	2.69%	\$65,554.33	2.75%	\$2,315,256.86	97.25%	\$2,380,811.19
MGMT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,700.00	91.70%	\$3,700.00	91.70%	\$334.74	8.30%	\$4,034.74
PROF & TECH	\$687,028.02	0.88%	\$612,231.00	0.78%	\$3,498,621.56	4.48%	\$1,372,943.19	1.76%	\$4,771,220.11	6.11%	\$10,942,043.88	14.02%	\$67,120,897.75	85.98%	\$78,062,941.63
TECH SVCS	\$1,104.00	0.81%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,620.00	6.29%	\$9,724.00	7.10%	\$127,236.75	92.90%	\$136,960.75
TRAINING	\$55,244.91	6.55%	\$14,000.00	1.66%	\$0.00	0.00%	\$0.00	0.00%	\$173,237.61	20.52%	\$242,482.52	28.73%	\$601,550.12	71.27%	\$844,032.64
Total	\$984,756.99	1.08%	\$626,231.00	0.68%	\$3,649,226.56	3.99%	\$1,417,293.44	1.55%	\$8,004,452.81	8.75%	\$14,681,960.80	16.04%	\$76,830,822.04	83.96%	\$91,512,782.84

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

² Not Classified Professional Services include account code descriptions ("fees - other" and "Other Misc Contract Services")

Approximately \$122 million were spent by the City on Professional Services contracts over the five-year study period. **Exhibit 4-48** shows the location of firms awarded Professional Services contracts by county of domicile and dollar amount. The relevant market area for the City's Professional Services contract awards consists of 10 counties. Approximately \$91 million (75%) of the \$122 million in total Professional Services awards went to firms in the relevant market area. A total of 6,709 POs were awarded to 546 firms within the relevant market area. Overall, 8,363 POs were awarded to 800 individual firms.

4.5.2 Utilization Analysis

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

MGT analyzed the Professional Services dollars awarded by the City to M/WBE and non-M/WBE prime consultants and subconsultants located in the relevant market area. The utilization analysis results are presented by calendar year, dollar amount of the PO/payment, number of POs awarded, and individual firms according to race/ethnicity/gender classifications.

Exhibit 4-49 presents the utilization analysis of Professional Services prime consultants in the City's relevant market area. M/WBEs received about 16 percent of the Professional Services dollars awarded to consultants in the relevant market area. Of

**EXHIBIT 4-48
PROFESSIONAL SERVICES
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of Payments/Pos	% of Payments/Pos	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% ²
MECKLENBURG, NC	6,267	74.94%	433	54.13%	\$71,168,992.52	58.42%	58.42%
FULTON, GA	87	1.04%	25	3.13%	\$5,253,587.54	4.31%	62.74%
WAKE, NC	103	1.23%	24	3.00%	\$3,996,310.35	3.28%	66.02%
COOK, IL	34	0.41%	13	1.63%	\$5,210,167.98	4.28%	70.30%
GUILFORD, NC	118	1.41%	10	1.25%	\$1,577,321.40	1.29%	71.59%
GASTON, NC	20	0.24%	9	1.13%	\$1,036,375.84	0.85%	72.44%
CABARRUS, NC	14	0.17%	9	1.13%	\$81,844.37	0.07%	72.51%
DALLAS, TX	15	0.18%	8	1.00%	\$2,329,737.43	1.91%	74.42%
RICHLAND, SC	25	0.30%	8	1.00%	\$315,880.95	0.26%	74.68%
FAIRFAX, VA	26	0.31%	7	0.88%	\$542,564.46	0.45%	75.13%
RELEVANT M.A. TOTAL	6,709	80.22%	546	68.25%	\$91,512,782.84	75.13%	N/A
WASHINGTON, DC	21	0.25%	7	0.88%	\$286,401.59	0.24%	75.36%
NEW YORK, NY	8	0.10%	7	0.88%	\$196,055.00	0.16%	75.52%
HARTFORD, CT	12	0.14%	6	0.75%	\$746,472.81	0.61%	76.13%
MONTGOMERY, MD	14	0.17%	6	0.75%	\$404,114.63	0.33%	76.47%
FORSYTH, NC	795	9.51%	6	0.75%	\$258,990.02	0.21%	76.68%
MIDDLESEX, MA	14	0.17%	6	0.75%	\$167,625.03	0.14%	76.82%
UNION, NC	26	0.31%	6	0.75%	\$52,505.68	0.04%	76.86%
GWINNETT, GA	17	0.20%	5	0.63%	\$1,810,278.07	1.49%	78.35%
SAN FRANCISCO, CA	23	0.28%	5	0.63%	\$988,479.23	0.81%	79.16%
NEW HANOVER, NC	62	0.74%	5	0.63%	\$265,918.94	0.22%	79.38%
CATAWBA, NC	26	0.31%	5	0.63%	\$95,242.97	0.08%	79.45%
YORK, SC	22	0.26%	5	0.63%	\$64,046.20	0.05%	79.51%
HAMILTON, OH	37	0.44%	4	0.50%	\$3,555,926.14	2.92%	82.43%
IREDELL, NC	6	0.07%	4	0.50%	\$101,168.68	0.08%	82.51%
JEFFERSON, AL	6	0.07%	4	0.50%	\$98,550.00	0.08%	82.59%
PHILADELPHIA, PA	8	0.10%	4	0.50%	\$64,263.00	0.05%	82.64%
ALEXANDRIA (CITY), VA	7	0.08%	4	0.50%	\$49,769.00	0.04%	82.68%
BALTIMORE (CITY), MD	8	0.10%	4	0.50%	\$40,454.81	0.03%	82.72%
BUNCOMBE, NC	6	0.07%	4	0.50%	\$32,391.25	0.03%	82.74%
LOS ANGELES, CA	11	0.13%	4	0.50%	\$22,175.00	0.02%	82.76%
LINCOLN, NC	7	0.08%	3	0.38%	\$871,324.69	0.72%	83.48%
SUFFOLK, MA	8	0.10%	3	0.38%	\$563,642.95	0.46%	83.94%
JEFFERSON, KY	5	0.06%	3	0.38%	\$172,589.45	0.14%	84.08%
DURHAM, NC	15	0.18%	3	0.38%	\$159,870.88	0.13%	84.21%
MARION, IN	66	0.79%	3	0.38%	\$127,470.00	0.10%	84.32%
BALTIMORE, MD	5	0.06%	3	0.38%	\$102,504.95	0.08%	84.40%
DENVER, CO	3	0.04%	3	0.38%	\$87,773.50	0.07%	84.47%
KING, WA	5	0.06%	3	0.38%	\$67,637.50	0.06%	84.53%
KNOX, TN	9	0.11%	3	0.38%	\$41,167.67	0.03%	84.56%
MIDDLESEX, NJ	8	0.10%	3	0.38%	\$27,904.80	0.02%	84.58%
ALLEGHENY, PA	33	0.39%	3	0.38%	\$25,512.70	0.02%	84.61%
OTHER	361	4.32%	120	15.00%	\$18,752,181.40	15.39%	100.00%
Total	8,363	100.00%	800	100.00%	\$121,813,191.38	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

**EXHIBIT 4-49
PROFESSIONAL SERVICES
UTILIZATION ANALYSIS OF PRIME CONSULTANTS IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$164,840.49	0.96%	\$27,690.00	0.16%	\$1,340,704.50	7.85%	\$26,649.90	0.16%	\$1,280,721.24	7.50%	\$2,840,606.13	16.63%	\$14,241,436.70	83.37%	\$17,082,042.83
1999	\$302,221.60	1.53%	\$4,000.00	0.02%	\$1,923,566.54	9.75%	\$42,475.25	0.22%	\$2,895,545.45	14.67%	\$5,167,808.84	26.18%	\$14,569,808.77	73.82%	\$19,737,617.61
2000	\$246,250.34	1.42%	\$180,741.00	1.04%	\$29,900.00	0.17%	\$569,856.64	3.29%	\$1,715,070.61	9.91%	\$2,741,818.59	15.84%	\$14,569,304.28	84.16%	\$17,311,122.87
2001	\$126,582.32	0.71%	\$0.00	0.00%	\$296,134.48	1.65%	\$748,886.20	4.18%	\$1,037,743.30	5.79%	\$2,209,346.30	12.32%	\$15,718,056.32	87.68%	\$17,927,402.62
2002	\$144,862.24	0.74%	\$413,800.00	2.13%	\$58,921.04	0.30%	\$29,425.45	0.15%	\$1,075,372.21	5.53%	\$1,722,380.94	8.85%	\$17,732,215.97	91.15%	\$19,454,596.91
Total	\$984,756.99	1.08%	\$626,231.00	0.68%	\$3,649,226.56	3.99%	\$1,417,293.44	1.55%	\$8,004,452.81	8.75%	\$14,681,960.80	16.04%	\$76,830,822.04	83.96%	\$91,512,782.84

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime consultants

the \$92 million spent by the City for Professional Services in the relevant market area, approximately \$14.7 million were awarded to M/WBEs, as shown in **Exhibit 4-49**. Nonminority-owned firms received almost 84 percent of the City's Professional Services dollars. In 2002, nonminority firms received more than 91 percent of the dollars. M/WBEs were more successful in winning Professional Services contracts in calendar year 1999. Professional Services contracts awarded to M/WBEs totaled \$5.2 million, or 26 percent of the total awards made that year. A list of Professional Services contracts is included in **Appendix N**.

The utilization of City certified firms in Professional Services is shown in **Appendix F, Exhibits F-7 and F-8**. Consistent with the other business categories, the majority of dollars going to M/WBE firms are going to those who are not certified by the City.

Exhibits 4-50 and 4-51 show the utilization by the number of POs and the number of Professional Services firms used during the study period. Our analysis shows that 912 (58%) of the 1,576 awards went to nonminority firms. Eighty-two (15%) of the 546 total firms used by the City for Professional Services contracts were M/WBEs. The majority of the M/WBE payments went to nonminority women-owned firms.

MGT also analyzed the utilization of M/WBE Professional Services firms by examining Professional Services awards in specific dollar ranges, similar to the Construction and Architecture and Engineering analyses. The established ranges were:

- contracts \$250,000 and under;
- contracts between \$250,001 and \$500,000;
- contracts between \$500,001 and \$1 million; and
- contracts over \$1 million.

**EXHIBIT 4-50
PROFESSIONAL SERVICES
CONTRACTS AWARDED
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Pos #
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998	69	21.50%	1	0.31%	5	1.56%	1	0.31%	58	18.07%	134	41.74%	187	58.26%	321
1999	69	12.95%	1	0.19%	3	0.56%	1	0.19%	229	42.96%	303	56.85%	230	43.15%	533
2000	17	5.43%	3	0.96%	1	0.32%	5	1.60%	104	33.23%	130	41.53%	183	58.47%	313
2001	8	3.48%	0	0.00%	1	0.43%	4	1.74%	38	16.52%	51	22.17%	179	77.83%	230
2002	9	5.03%	5	2.79%	1	0.56%	1	0.56%	30	16.76%	46	25.70%	133	74.30%	179
Total Contracts	172	10.91%	10	0.63%	11	0.70%	12	0.76%	459	29.12%	664	42.13%	912	57.87%	1,576

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of Total Contracts.

**EXHIBIT 4-51
PROFESSIONAL SERVICES
NUMBER OF INDIVIDUAL PRIME CONSULTANTS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	9	5.49%	1	0.61%	2	1.22%	1	0.61%	20	12.20%	33	20.12%	131	79.88%	164
1999	9	5.03%	1	0.56%	1	0.56%	1	0.56%	18	10.06%	30	16.76%	149	83.24%	179
2000	9	4.89%	2	1.09%	1	0.54%	3	1.63%	18	9.78%	33	17.93%	151	82.07%	184
2001	8	4.08%	0	0.00%	1	0.51%	3	1.53%	16	8.16%	28	14.29%	168	85.71%	196
2002	6	3.21%	2	1.07%	1	0.53%	1	0.53%	13	6.95%	23	12.30%	164	87.70%	187
Total Unique Vendors Over Five Years ²	26	4.76%	3	0.55%	2	0.37%	4	0.73%	47	8.61%	82	15.02%	464	84.98%	546

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

POs \$250,000 and Under

The City of Charlotte awarded 1,495 POs from calendar year 1998 through 2002 on Professional Services contracts of \$250,000 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-52**. As **Exhibit 4-52** illustrates, M/WBE firms received about 44 percent of the contract dollars in this category. Nonminority women-owned firms were the most utilized M/WBE category, receiving 30 percent of the POs. Hispanic American-owned, Asian American-owned, and Native American-owned firms were the least utilized, with 10, 7, and 10 POs respectively. Non-M/WBE firms received 56 percent of the POs.

POs between \$250,001 and \$500,000

Forty-nine Professional Services POs between the \$250,001 and \$500,000 range were awarded during the five-year study period. Seven of these awards went to M/WBEs. There were no awards made to African American or Hispanic American firms. Nonminority-owned firms received 86 percent of the POs for this category.

POs between \$500,001 and \$1 million

There were 20 POs awarded for Professional Services contracts over \$500,000 and less than \$1 million. Sixteen of the 20 contracts were awarded to nonminority-owned firms. There were four M/WBE firms utilized for this dollar category, three women-owned and one Asian American-owned firm.

POs over \$1 million

The City awarded 12 POs of \$1 million or more for Professional Services in the relevant market area. Two of these went to M/WBE firms, both of which went to Asian American-owned firms.

**EXHIBIT 4-52
CITY OF CHARLOTTE THRESHOLD ANALYSIS
UTILIZATION OF PROFESSIONAL SERVICES CONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs Awarded
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
Less than or Equal to \$250,000	172	11.51%	10	0.67%	7	0.47%	10	0.67%	452	30.23%	651	43.55%	844	56.45%	1,495
Between \$250,001 and \$500,000	0	0.00%	0	0.00%	1	2.04%	2	4.08%	4	8.16%	7	14.29%	42	85.71%	49
Between \$500,001 and \$1 million	0	0.00%	0	0.00%	1	5.00%	0	0.00%	3	15.00%	4	20.00%	16	80.00%	20
Greater than \$1 million	0	0.00%	0	0.00%	2	16.67%	0	0.00%	0	0.00%	2	16.67%	10	83.33%	12
Total	172	10.91%	10	0.63%	11	0.70%	12	0.76%	459	29.12%	664	42.13%	912	57.87%	1,576

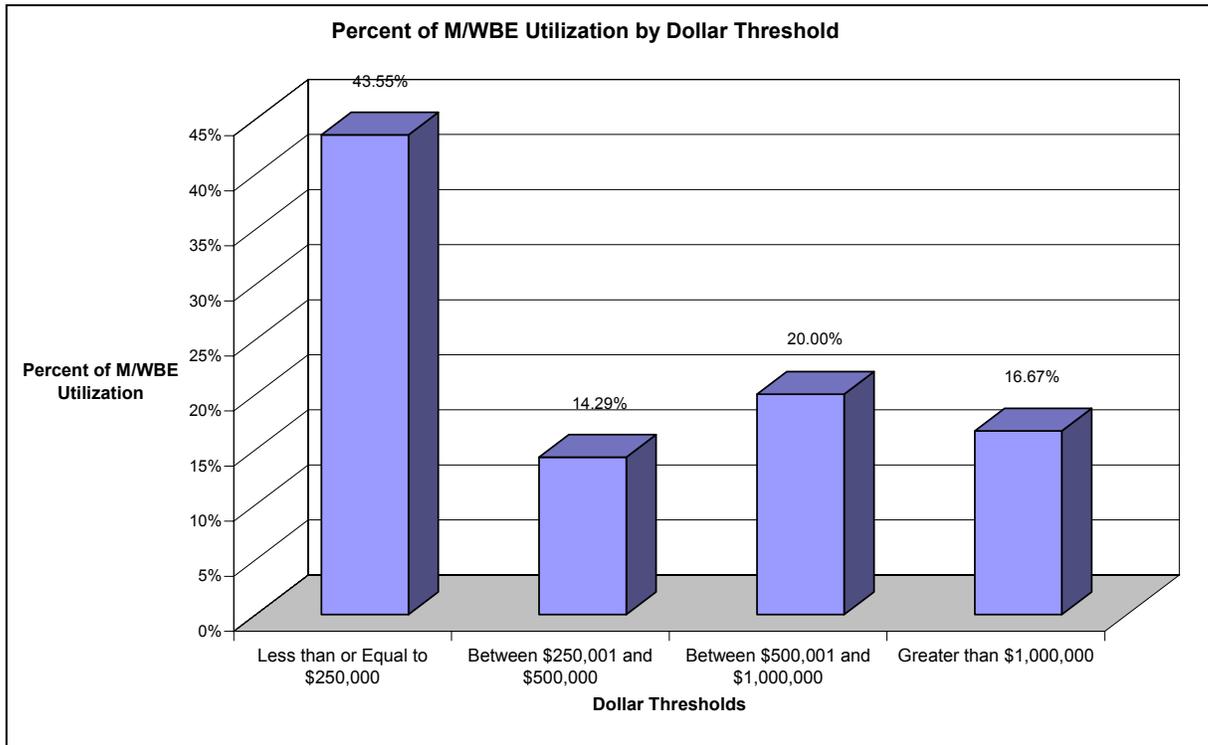
Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total POs awarded to prime consultants.

Contract dollar ranges

Exhibit 4-53 shows a graphical comparison of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as contract dollars rose. M/WBE firms were awarded almost 44 percent of the contracts less than \$250,000, and 14 percent on contracts between \$250,001 and \$500,000. The chart below shows that M/WBE firms are much more likely to win smaller Professional Services contracts that larger ones.

**EXHIBIT 4-53
CITY OF CHARLOTTE
UTILIZATION OF M/WBE PRIME PROFESSIONAL SERVICES CONSULTANTS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

Subconsultant Analysis

It should be noted that during the study period, the City required prime contractors to report utilization of M/WBE subcontractors, but not nonminority subcontractors. As a result the data collected does not portray all subcontracts. Verification reports were used to supplement the subcontract data collected. The subcontractor analyses based

on verification reports only is shown in **Appendix I**. In addition, payment affidavits were sent to contractors that had payments in 2002. The subcontractor analyses based on payment affidavits only is shown in **Appendix I**.

When we compare the percent of total subconsultant dollars awarded to M/WBEs using the three subconsultant analyses, the affect of the incomplete nonminority male subconsultant data is highlighted. Using the full set of subconsultant data (**Exhibit 4-54**) 13.77 percent of subconsultant dollars went to M/WBEs; compared to verification reports (**Exhibit I-3**) – 10.66 percent of subconsultant dollars went to M/WBEs, and compared to the payment affidavits (**Exhibit I-4**) – 51.35 percent of subconsultant dollars to M/WBEs.

Exhibit 4-54 shows the utilization of subconsultants for Professional Services contracts. M/WBE's were awarded \$592,000 of professional services subcontracts, with nonminority women receiving the most of M/WBE's (\$396,000) and Hispanic American receiving the second most of M/WBEs (\$144,000). M/WBEs were most successful in calendar year 1998. A list of Professional Services subconsultant contracts analysis is shown in **Appendix O**.

MGT also conducted an analysis of the utilization of M/WBE Professional Services subconsulting firms by examining contracts in specific dollar ranges. The dollar ranges for subconsulting follow:

- contracts \$50,000 and under;
- contracts between \$50,001 and \$100,000;
- contracts between \$100,001 and \$250,000; and
- contracts over \$250,000.

Contracts \$50,000 and Under

There were 78 Professional Services subconsulting contracts between calendar years 1998 and 2002 for \$50,000 or under. The utilization of M/WBE and non-M/WBE firms for each dollar range category is shown in **Exhibit 4-55**. As **Exhibit 4-55** illustrates,

**EXHIBIT 4-54
PROFESSIONAL SERVICES
UTILIZATION ANALYSIS OF SUBCONSULTANTS
IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority		Total Sub Dollars Awarded ²
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	
1998	\$0.00	0.00%	\$144,266.18	45.65%	\$0.00	0.00%	\$0.00	0.00%	\$80,628.46	25.51%	\$224,894.64	71.16%	\$91,154.00	28.84%	\$316,048.64
1999	\$12,200.00	11.50%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,400.00	6.03%	\$18,600.00	17.53%	\$87,500.52	82.47%	\$106,100.52
2000	\$0.00	0.00%	\$0.00	0.00%	\$15,520.00	1.98%	\$0.00	0.00%	\$84,594.00	10.78%	\$100,114.00	12.76%	\$684,560.81	87.24%	\$784,674.81
2001	\$1,661.00	0.42%	\$0.00	0.00%	\$21,250.00	5.36%	\$0.00	0.00%	\$144,324.00	36.44%	\$167,235.00	42.22%	\$228,860.00	57.78%	\$396,095.00
2002	\$0.00	0.00%	\$0.00	0.00%	\$1,500.00	0.06%	\$0.00	0.00%	\$79,908.70	2.96%	\$81,408.70	3.02%	\$2,617,396.25	96.98%	\$2,698,804.95
Total	\$13,861.00	0.32%	\$144,266.18	3.35%	\$38,270.00	0.89%	\$0.00	0.00%	\$395,855.16	9.20%	\$592,252.34	13.77%	\$3,709,471.58	86.23%	\$4,301,723.92

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 to 2002.

¹ Percentage of Total Dollars Awarded.

² The Total Dollars Awarded is the actual amount given to all subconsultants..

**EXHIBIT 4-55
CITY OF CHARLOTTE THRESHOLD ANALYSIS
UTILIZATION OF PROFESSIONAL SERVICES SUBCONSULTANTS IN RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
BY DOLLAR CATEGORIES
CALENDAR YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs Awarded
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
Less than or Equal to \$50,000	2	2.56%	2	2.56%	6	7.69%	1	1.28%	45	57.69%	56	71.79%	22	28.21%	78
Between \$50,001 and \$100,000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	22.22%	2	22.22%	7	77.78%	9
Between \$100,001 and \$250,000	0	0.00%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	1	25.00%	3	75.00%	4
Greater than \$250,000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	100.00%	2
Total	2	2.15%	3	3.23%	6	6.45%	1	1.08%	47	50.54%	59	63.44%	34	36.56%	93

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total POs awarded to prime consultants.

M/WBEs received about 71 percent of the subcontracts in this category. Nonminority women-owned firms were the most utilized M/WBEs in this dollar range, receiving 45 subcontracts.

Contracts between \$50,001 and \$100,000

Nine subcontracts were awarded by primes for Professional Services between \$50,001 and \$100,000 in the five-year study period. M/WBEs received two subcontracts in this dollar range, both nonminority women-owned.

Contracts greater than \$100,000

There were six subcontracts awarded for Professional Services projects over \$100,000. A Hispanic American firm received one of these subcontracts.

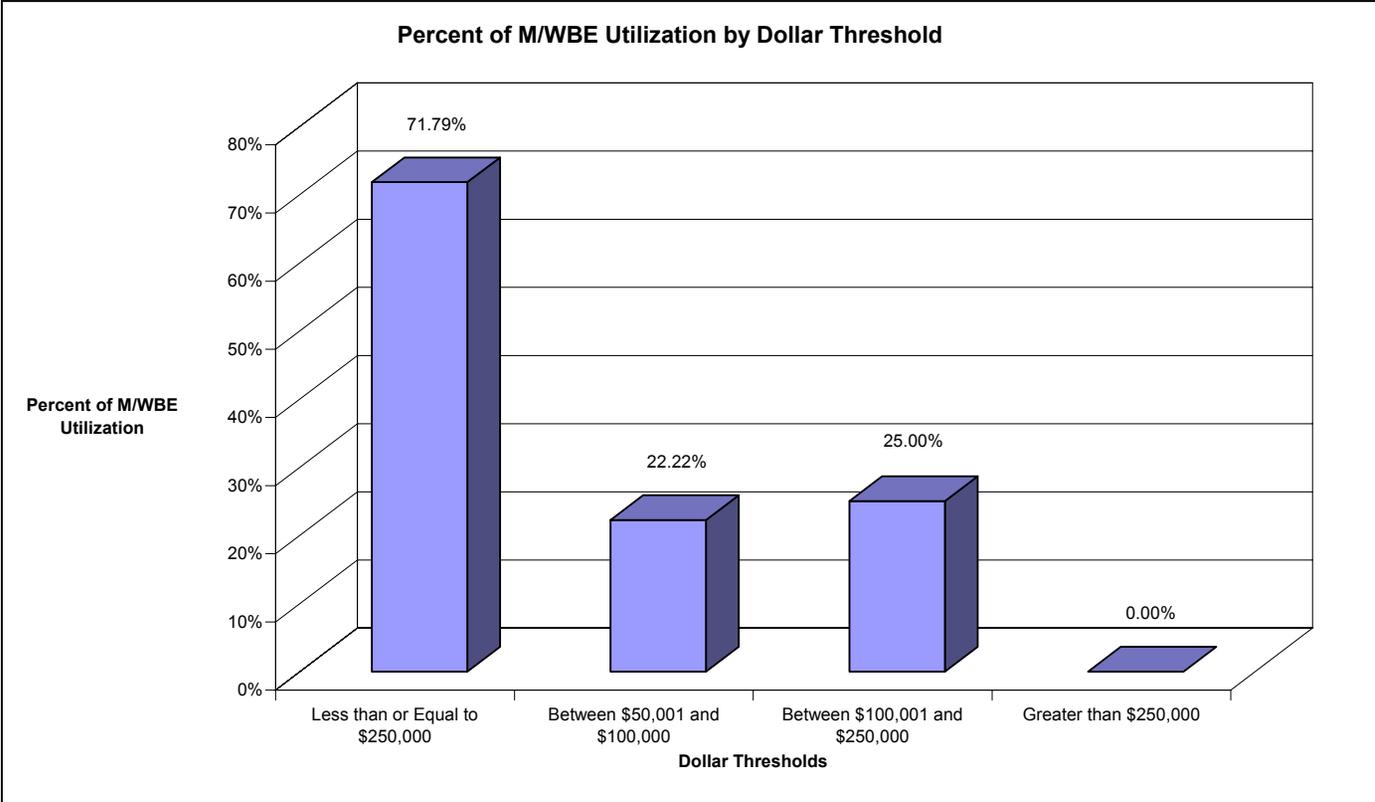
Contract dollar ranges

Exhibit 4-56 shows a comparison graph of the dollar ranges for the utilization of M/WBEs and illustrates how M/WBE firms fared as subcontract dollars rose. Overall, M/WBEs share was 59 subcontracts.

4.5.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for professional services was derived from those firms (1) have performed prime or subconsultant professional services for the City in the past; (2) have submitted qualifications for professional services for the City in the past; (3) have registered with any of the City's KBUs as professional service firms; (4) are registered with any of the agencies listed in section 4.1.3 and it could be determined that they were professional service firms, or (5) performed or submitted qualifications on professional services for Mecklenburg County or Charlotte-Mecklenburg Schools.

**EXHIBIT 4-56
CITY OF CHARLOTTE
UTILIZATION OF M/WBE PROFESSIONAL SERVICES SUBCONSULTANTS
WITHIN CONTRACT DOLLAR RANGES
CALENDAR YEARS 1998 THROUGH 2002**



Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

All firms that met the qualifications stated above, are considered subconsultants available to perform professional services for the City. MGT took the results from the vendor survey to further distinguish available prime contractors. On the survey instrument was a question asking the vendor if he/she had ever performed work as a prime contractor, prime consultant, or supplier on a project in either the public or private sector. If the firm answered “Never,” MGT considered these firms as available as a subcontractor only, and not available as a prime. MGT then took the percentage distribution of the returned results, identified those firms that did not respond to the survey, and reduced the prime availability accordingly.

The availability of prime and subconsultants is derived from MGT’s master vendor database. **Exhibit 4-57** shows the available Professional Services consultants that are within the relevant market area. **Exhibit 4-58** shows the available Professional Services subconsultants within the relevant market area. The exhibits show the distribution of prime consultants and subconsultants by race, ethnicity, and gender.

M/WBEs made up 22 percent of the available Professional Services primes and 29 percent of subconsultants. The majority of available M/WBE firms for Professional Services were African American- and nonminority woman-owned firms.

4.5.4 Professional Services Analysis by City Key Business Unit

This analysis for Professional Services contracts is on the utilization dollars by City Department or Key Business Unit. Each payment made on behalf of a department for a Professional Services related purchase was counted in this analysis. In **Exhibit 4-59**, there is a breakdown of dollars paid to each ethnicity group of vendors by each department. CMUD and Engineering and Property Management were the largest users of Professional Services contracts.

**EXHIBIT 4-57
PROFESSIONAL SERVICES
AVAILABILITY OF PRIME CONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	93	7.60%	14	1.15%	24	1.97%	10	0.82%	129	10.55%	270	22.08%	951	77.92%	1,221

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

² Hispanic American, Native American and Asian American firms were not weighted due to small sample size from vendor survey.

**EXHIBIT 4-58
PROFESSIONAL SERVICES
AVAILABILITY OF SUBCONSULTANTS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	175	13.09%	14	1.05%	24	1.79%	10	0.75%	163	12.19%	386	28.86%	951	71.14%	1,337

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-59
PROFESSIONAL SERVICES
UTILIZATION ANALYSIS OF PRIME CONSULTANTS BY DEPARTMENT
IN THE RELEVANT MARKET AREA BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Department Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
AVIATION	\$267,021.26	8.87%	\$0.00	0.00%	\$0.00	0.00%	\$26,649.90	0.88%	\$369,466.80	12.27%	\$663,137.96	22.02%	\$2,348,815.18	77.98%	\$3,011,953.14
BUDGET & EVALUATION	\$1,604.06	1.14%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,604.06	1.14%	\$138,634.74	98.86%	\$140,238.80
B S S	\$39,629.60	0.30%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,783,139.00	13.41%	\$1,822,768.60	13.71%	\$11,469,811.48	86.29%	\$13,292,580.08
CATS	\$355.95	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,145,756.78	8.25%	\$1,146,112.73	8.26%	\$12,735,210.92	91.74%	\$13,881,323.65
CITY ATTORNEY	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$240,562.79	100.00%	\$240,562.79
CITY CLERK	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$53,743.20	100.00%	\$53,743.20
CITY MANAGER	\$6,666.75	1.93%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$731.10	0.21%	\$7,397.85	2.14%	\$337,815.41	97.86%	\$345,213.26
CMUD	\$92,317.50	0.46%	\$584,541.00	2.92%	\$705.00	0.00%	\$0.00	0.00%	\$1,814,279.42	9.07%	\$2,491,842.92	12.45%	\$17,517,980.20	87.55%	\$20,009,823.12
E & P M	\$43,231.71	0.16%	\$27,690.00	0.11%	\$3,598,521.56	13.69%	\$1,335,327.90	5.08%	\$1,436,021.36	5.46%	\$6,440,792.53	24.51%	\$19,841,832.79	75.49%	\$26,282,625.32
FINANCE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$693,601.25	11.98%	\$693,601.25	11.98%	\$5,096,516.35	88.02%	\$5,790,117.60
FIRE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,490.87	100.00%	\$6,490.87
HUMAN RESOURCES	\$4,524.65	1.59%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,524.65	1.59%	\$280,275.38	98.41%	\$284,800.03
NEIGHBORHOOD DEV	\$321,195.20	11.22%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$92,475.00	3.23%	\$413,670.20	14.45%	\$2,448,486.06	85.55%	\$2,862,156.26
PLANNING COMMISSION	\$6,000.00	3.08%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$51,026.00	26.21%	\$57,026.00	29.30%	\$137,620.27	70.70%	\$194,646.27
POLICE	\$100,862.00	8.18%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$68,248.69	5.53%	\$169,110.69	13.71%	\$1,064,130.49	86.29%	\$1,233,241.18
SOLID WASTE SERVICES	\$83.16	2.71%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$83.16	2.71%	\$2,986.50	97.29%	\$3,069.66
TRAINING TEAM	\$0.00	0.00%	\$14,000.00	10.31%	\$0.00	0.00%	\$0.00	0.00%	\$37,225.00	27.42%	\$51,225.00	37.73%	\$84,530.30	62.27%	\$135,755.30
TRANSPORTATION	\$36,071.51	2.10%	\$0.00	0.00%	\$50,000.00	2.92%	\$0.00	0.00%	\$277,899.00	16.21%	\$363,970.51	21.24%	\$1,350,038.97	78.76%	\$1,714,009.48
UNKNOWN	\$65,193.64	3.21%	\$0.00	0.00%	\$0.00	0.00%	\$55,315.64	2.72%	\$234,583.41	11.55%	\$355,092.69	17.49%	\$1,675,340.14	82.51%	\$2,030,432.83
Total	\$984,756.99	1.08%	\$626,231.00	0.68%	\$3,649,226.56	3.99%	\$1,417,293.44	1.55%	\$8,004,452.81	8.75%	\$14,681,960.80	16.04%	\$76,830,822.04	83.96%	\$91,512,782.84

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime consultants.

4.5.5 Professional Services Decomposition

MGT was able to further break down the payments to vendors of professional services into nine subcategories (Accounting, Advertising, Laboratory Testing, Legal, Management, Professional and Technical, Technical Services, Training, and Not Classified). These analyses are shown in **Exhibits 4-60 and 4-61**, as well as the number of city certified M/WBE vendors available. The majority of dollars spent fell in the professional technical category that had 14 percent M/WBE utilization. While the overall utilization of M/WBEs for professional services was 16 percent, when decomposed the M/WBE utilization varied considerably from zero in Accounting to 82 percent in laboratory testing

4.6 Other Services

The market area and utilization of M/WBEs and non-M/WBEs for City Other Services procurements are examined in this section. Subcontractor analyses were not performed for Other Services vendors because this business category does not typically involve significant amounts of subcontract work.

4.6.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determine by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

Exhibit 4-62 shows the relevant market area analysis for Other Services procurements by the City. During the study period, the City spent approximately \$550 million on Other Services purchases. There were 23 counties that fell within the relevant market area. Seventy-five percent of the overall purchases were made in these counties, representing \$412 million.

**EXHIBIT 4-60
PROFESSIONAL SERVICES PRIME CONSULTANTS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
NOT CLASSIFIED	\$48,500.00	0.96%	\$0.00	0.00%	\$149,900.00	2.97%	\$42,475.25	0.84%	\$978,750.00	19.42%	\$1,219,625.25	24.20%	\$3,819,637.14	75.80%	\$5,039,262.39
ACCT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$221,702.80	100.00%	\$221,702.80
ADV	\$191,380.06	4.80%	\$0.00	0.00%	\$0.00	0.00%	\$1,875.00	0.05%	\$1,311,247.52	32.92%	\$1,504,502.58	37.77%	\$2,479,010.46	62.23%	\$3,983,513.04
LAB TEST	\$0.00	0.00%	\$0.00	0.00%	\$705.00	0.08%	\$0.00	0.00%	\$693,623.24	82.62%	\$694,328.24	82.71%	\$145,195.42	17.29%	\$839,523.66
LEGAL	\$1,500.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64,054.33	2.69%	\$65,554.33	2.75%	\$2,315,256.86	97.25%	\$2,380,811.19
MGMT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,700.00	91.70%	\$3,700.00	91.70%	\$334.74	8.30%	\$4,034.74
PROF & TECH	\$687,028.02	0.88%	\$612,231.00	0.78%	\$3,498,621.56	4.48%	\$1,372,943.19	1.76%	\$4,771,220.11	6.11%	\$10,942,043.88	14.02%	\$67,120,897.75	85.98%	\$78,062,941.63
TECH SVCS	\$1,104.00	0.81%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,620.00	6.29%	\$9,724.00	7.10%	\$127,236.75	92.90%	\$136,960.75
TRAINING	\$55,244.91	6.55%	\$14,000.00	1.66%	\$0.00	0.00%	\$0.00	0.00%	\$173,237.61	20.52%	\$242,482.52	28.73%	\$601,550.12	71.27%	\$844,032.64
Total	\$984,756.99	1.08%	\$626,231.00	0.68%	\$3,649,226.56	3.99%	\$1,417,293.44	1.55%	\$8,004,452.81	8.75%	\$14,681,960.80	16.04%	\$76,830,822.04	83.96%	\$91,512,782.84

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

² Not Classified Professional Services include account code descriptions ("fees - other" and "Other Misc Contract Services")

**EXHIBIT 4-61
PROFESSIONAL SERVICES PRIME CONSULTANTS UTILIZATION # OF POs
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's Awarded	Total Avail MWBES
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	#
NOT CLASSIFIED	1	0.83%	0	0.00%	4	3.33%	1	0.83%	24	20.00%	30	25.00%	90	75.00%	120	
ACCT	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	14	100.00%	14	33
ADV	1,109	56.21%	0	0.00%	0	0.00%	1	0.05%	71	3.60%	1,181	59.86%	792	40.14%	1,973	32
LAB TEST	0	0.00%	0	0.00%	1	0.03%	0	0.00%	2,892	94.26%	2,893	94.30%	175	5.70%	3,068	0
LEGAL	1	0.32%	0	0.00%	0	0.00%	0	0.00%	3	0.96%	4	1.28%	308	98.72%	312	0
MGMT	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%	1	50.00%	1	50.00%	2	9
PROF & TECH	47	4.80%	7	0.71%	7	0.71%	14	1.43%	167	17.04%	242	24.69%	738	75.31%	980	60
TECH SVCS	1	4.35%	0	0.00%	0	0.00%	0	0.00%	3	13.04%	4	17.39%	19	82.61%	23	48
TRAINING	10	4.61%	3	1.38%	0	0.00%	0	0.00%	55	25.35%	68	31.34%	149	68.66%	217	0
Total	1,169	17.42%	10	0.15%	12	0.18%	16	0.24%	3,216	47.94%	4,423	65.93%	2,286	34.07%	6,709	182

Source: MGI developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total POs awarded annually to prime contractors.

² Not Classified Professional Services include account code descriptions ("fees - other" and "Other Misc Contract Services")

**EXHIBIT 4-62
OTHER SERVICES
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of Payments/Pos	% of Payments/Pos	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum % ²
MECKLENBURG, NC	73,930	65.53%	2,912	50.22%	\$276,286,910.74	50.19%	50.19%
WAKE, NC	2,110	1.87%	152	2.62%	\$44,835,394.39	8.14%	58.34%
FULTON, GA	2,039	1.81%	117	2.02%	\$10,382,858.16	1.89%	60.22%
GASTON, NC	1,255	1.11%	117	2.02%	\$5,462,888.91	0.99%	61.21%
CABARRUS, NC	1,062	0.94%	107	1.85%	\$8,792,634.49	1.60%	62.81%
COOK, IL	1,341	1.19%	103	1.78%	\$15,674,159.86	2.85%	65.66%
YORK, SC	1,081	0.96%	98	1.69%	\$3,501,879.44	0.64%	66.30%
UNION, NC	561	0.50%	84	1.45%	\$4,647,497.99	0.84%	67.14%
GUILFORD, NC	1,106	0.98%	75	1.29%	\$5,427,641.27	0.99%	68.13%
DALLAS, TX	328	0.29%	44	0.76%	\$4,170,574.01	0.76%	68.88%
IREDELL, NC	2,101	1.86%	39	0.67%	\$4,907,979.50	0.89%	69.77%
DURHAM, NC	147	0.13%	38	0.66%	\$1,329,509.98	0.24%	70.02%
RICHLAND, SC	402	0.36%	34	0.59%	\$2,569,444.97	0.47%	70.48%
WASHINGTON, DC	103	0.09%	30	0.52%	\$302,814.70	0.06%	70.54%
ROWAN, NC	63	0.06%	30	0.52%	\$90,167.79	0.02%	70.55%
FAIRFAX, VA	199	0.18%	28	0.48%	\$1,069,515.71	0.19%	70.75%
LINCOLN, NC	152	0.13%	27	0.47%	\$2,998,135.97	0.54%	71.29%
FORSYTH, NC	323	0.29%	27	0.47%	\$2,890,041.86	0.53%	71.82%
GREENVILLE, SC	94	0.08%	27	0.47%	\$135,541.09	0.02%	71.84%
SPARTANBURG, SC	74	0.07%	26	0.45%	\$41,408.81	0.01%	71.85%
ALLEGHENY, PA	414	0.37%	25	0.43%	\$651,272.01	0.12%	71.97%
PHILADELPHIA, PA	605	0.54%	22	0.38%	\$14,157,225.10	2.57%	74.54%
CATAWBA, NC	426	0.38%	22	0.38%	\$2,511,348.53	0.46%	75.00%
RELEVANT M.A. TOTAL	89,916	79.70%	4,184	72.16%	\$412,836,845.28	75.00%	N/A
ORANGE, NC	323	0.29%	22	0.38%	\$666,279.23	0.12%	75.12%
KING, WA	44	0.04%	20	0.34%	\$3,784,637.32	0.69%	75.81%
HAMILTON, OH	172	0.15%	20	0.34%	\$479,999.61	0.09%	75.89%
MIDDLESEX, MA	68	0.06%	20	0.34%	\$372,070.58	0.07%	75.96%
GWINNETT, GA	196	0.17%	19	0.33%	\$1,481,628.62	0.27%	76.23%
MONTGOMERY, MD	60	0.05%	19	0.33%	\$564,830.56	0.10%	76.33%
NEW HANOVER, NC	468	0.41%	18	0.31%	\$13,172,573.88	2.39%	78.73%
LEXINGTON, SC	76	0.07%	18	0.31%	\$343,486.59	0.06%	78.79%
LANCASTER, SC	83	0.07%	18	0.31%	\$318,272.03	0.06%	78.85%
ALAMANCE, NC	370	0.33%	18	0.31%	\$312,971.83	0.06%	78.90%
DU PAGE, IL	119	0.11%	18	0.31%	\$190,181.56	0.03%	78.94%
ORANGE, CA	128	0.11%	17	0.29%	\$1,534,732.44	0.28%	79.22%
LOS ANGELES, CA	69	0.06%	17	0.29%	\$169,754.07	0.03%	79.25%
CHARLESTON, SC	57	0.05%	17	0.29%	\$161,361.83	0.03%	79.28%
SUMTER, SC	20	0.02%	17	0.29%	\$33,714.52	0.01%	79.28%
CRAVEN, NC	22	0.02%	17	0.29%	\$4,960.89	0.00%	79.28%
ORANGE, FL	301	0.27%	16	0.28%	\$254,712.68	0.05%	79.33%
MARICOPA, AZ	92	0.08%	15	0.26%	\$1,170,356.15	0.21%	79.54%
NEW YORK, NY	68	0.06%	15	0.26%	\$327,219.21	0.06%	79.60%
HARRIS, TX	61	0.05%	14	0.24%	\$1,531,798.84	0.28%	79.88%
CUMBERLAND, NC	37	0.03%	14	0.24%	\$1,079,969.10	0.20%	80.08%
CLEVELAND, NC	46	0.04%	14	0.24%	\$457,624.38	0.08%	80.16%
OTHER	20026	17.75%	1,231.00	21.23%	\$109,220,702.14	19.84%	100.00%
Total	112,822	100.00%	5,798	100.00%	\$550,470,683.34	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

4.6.2 Utilization Analysis

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

This section presents the utilization analysis of Other Services vendors, which includes an analysis of the number of payments made and the number of individual firms by race/ethnicity/gender classifications. The utilization analysis is presented in **Exhibit 4-63**. As the exhibit shows, M/WBEs received almost 12 percent of the Other Services procurements made by the City during the study period. This represented \$49 million dollars out of over \$412 million in Other Services procurements. A list of contracts/payments analyzed for Other Services is shown in **Appendix P**.

The utilization of city certified firms in Other Services is shown in **Appendix F, Exhibits F-9 and F-10**.

Of the M/WBE firms that provided Other Services to the City, African American and nonminority woman-owned firms received the most dollars—around 2.6 and 6.0 percent, respectively. Hispanic American-owned firms received less than 1 percent of purchase dollars. **Exhibit 4-64** shows the number of Other Services procurements made to firms in the relevant market area over the five-year period. It can be seen that nonminority women-owned firms received the majority of M/WBE POs with 764, or 8.37

**EXHIBIT 4-63
OTHER SERVICES
UTILIZATION ANALYSIS OF VENDORS IN THE RELEVANT MARKET AREAS
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$1,706,946.24	2.33%	\$542,162.74	0.74%	\$1,283,996.56	1.75%	\$1,222,531.42	1.67%	\$3,719,962.25	5.07%	\$8,475,599.21	11.55%	\$64,901,919.90	88.45%	\$73,377,519.11
1999	\$1,495,339.39	1.75%	\$744,020.84	0.87%	\$1,136,270.76	1.33%	\$697,428.18	0.81%	\$4,673,231.09	5.45%	\$8,746,290.26	10.21%	\$76,936,108.62	89.79%	\$85,682,398.88
2000	\$2,291,126.77	2.82%	\$474,150.71	0.58%	\$1,768,281.35	2.18%	\$412,405.41	0.51%	\$4,004,683.75	4.93%	\$8,950,647.99	11.02%	\$72,247,678.97	88.98%	\$81,198,326.96
2001	\$3,794,918.56	3.56%	\$980,633.62	0.92%	\$1,120,901.26	1.05%	\$401,644.49	0.38%	\$6,702,083.34	6.29%	\$13,000,181.27	12.20%	\$93,517,186.61	87.80%	\$106,517,367.88
2002	\$1,407,608.99	2.13%	\$754,498.01	1.14%	\$566,821.27	0.86%	\$1,739,514.54	2.63%	\$5,631,182.11	8.52%	\$10,099,624.92	15.29%	\$55,961,607.53	84.71%	\$66,061,232.45
Total	\$10,695,939.95	2.59%	\$3,495,465.92	0.85%	\$5,876,271.20	1.42%	\$4,473,524.04	1.08%	\$24,731,142.54	5.99%	\$49,272,343.65	11.94%	\$363,564,501.63	88.06%	\$412,836,845.28

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-64
OTHER SERVICES
NUMBER OF CONTRACTS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	112	4.30%	24	0.92%	13	0.50%	9	0.35%	165	6.33%	323	12.39%	2,284	87.61%	2,607
1999	101	3.76%	34	1.27%	13	0.48%	3	0.11%	238	8.86%	389	14.49%	2,296	85.51%	2,685
2000	75	3.84%	24	1.23%	11	0.56%	4	0.21%	173	8.87%	287	14.71%	1,664	85.29%	1,951
2001	26	2.66%	15	1.54%	7	0.72%	6	0.61%	105	10.76%	159	16.29%	817	83.71%	976
2002	34	3.75%	8	0.88%	6	0.66%	16	1.77%	83	9.16%	147	16.23%	759	83.77%	906
Total PO's	348	3.81%	105	1.15%	50	0.55%	38	0.42%	764	8.37%	1,305	14.30%	7,820	85.70%	9,125

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of Total POs

percent, of all the Other Service contract awards. **Exhibit 4-65** shows the number of unique vendors awarded dollars for other services. Nine percent of the utilized vendors were M/WBEs. Nonminority women- and African American- owned firms make up the majority of these firms, with 4.73 percent and 3.20 percent, respectively.

4.6.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for other services was derived from those firms (1) have performed other services for the City in the past; (2) have submitted bids for other services for the City in the past; (3) have registered with any of the City's KBUs as other service firms; (4) are registered with any of the agencies listed in section 4.1.3 and it could be determined that they were other service firms, or (5) performed or submitted bids on other services for Mecklenburg County or Charlotte-Mecklenburg Schools.

Exhibit 4-66 shows the relative distribution of available Other Services vendors. The Other Services availability is shown in Exhibit 4-66. In the exhibit, we show that M/WBEs represented less than 12 percent of the available vendors. Firms owned by nonminority women and African Americans accounted for almost all of those firms (10.31%) combined. The majority of Other Services vendors were non-M/WBEs (88.6% of total vendors).

**EXHIBIT 4-65
OTHER SERVICES
NUMBER OF UNIQUE VENDORS UTILIZED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	58	4.21%	7	0.51%	6	0.44%	7	0.51%	77	5.59%	155	11.26%	1,222	88.74%	1,377
1999	49	2.93%	5	0.30%	6	0.36%	3	0.18%	102	6.10%	165	9.86%	1,508	90.14%	1,673
2000	56	3.10%	8	0.44%	8	0.44%	3	0.17%	103	5.70%	178	9.85%	1,629	90.15%	1,807
2001	66	3.52%	5	0.27%	10	0.53%	4	0.21%	107	5.71%	192	10.25%	1,681	89.75%	1,873
2002	58	3.22%	9	0.50%	11	0.61%	6	0.33%	102	5.66%	186	10.32%	1,616	89.68%	1,802
Total Unique Vendors Over Five Years ²	134	3.20%	13	0.31%	17	0.41%	11	0.26%	198	4.73%	373	8.91%	3,812	91.09%	4,185

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

**EXHIBIT 4-66
OTHER SERVICES
AVAILABILITY OF PRIME VENDORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	374	5.60%	26	0.39%	31	0.46%	18	0.27%	314	4.71%	763	11.43%	5,910	88.57%	6,673

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

4.6.4 Other Services Analysis by City Key Business Unit

MGT also completed an analysis for Other Services contracts by City Department or Key Business Unit. Each payment made on behalf of a department for Other Services related purchase was counted in this analysis. In **Exhibit 4-67**, there is a breakdown of dollars paid to each ethnicity group of vendors by each department.

4.6.5 Other Services Decomposition

MGT was able to further break down the payments to other services vendors into 14 subcategories (Equipment Rental, Janitorial and Maintenance Services, Landfill Services, Laundry and Cleaning, Maintenance and Repairs, Printing, Real Property, Security Services, Special Department Supplies, Subsidized Care and Support, Technical Services, Telecommunications, Temporary Help, and Not Classified). The analysis as shown in **Exhibits 4-68 and 4-69** shows the number of purchase orders and dollars per category, as well as the number of city certified M/WBE firms available. Temporary services and real property had the largest utilization of M/WBEs, 30 and 29 percent respectively. While the overall utilization of M/WBE firms was 11.94 percent, the amount based on the decomposed categories varied considerably, from zero for technical services to 30 percent for temporary help. The largest number of available city certified M/WBE vendors was in the maintenance and repairs category.

4.7 Goods and Supplies

This section presents our analysis of the Goods and Supplies procurements for the City during the study period. The market area and utilization of M/WBEs and non-M/WBEs are examined in this section. As with previously mentioned Other Services, there are few subcontracting opportunities for Goods and Supplies procurements, so we have not included subcontract level analysis for Goods and Supplies procurements.

**EXHIBIT 4-67
OTHER SERVICES
UTILIZATION ANALYSIS OF PRIME CONTRACTORS BY DEPARTMENT
IN THE RELEVANT MARKET AREA BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Department Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
AVIATION	\$730,663.77	1.60%	\$126,950.00	0.28%	\$38,096.32	0.08%	\$191,023.40	0.42%	\$2,287,625.53	5.01%	\$3,374,359.02	7.39%	\$42,298,570.44	92.61%	\$45,672,929.46
BUDGET & EVALUATION	\$282.94	0.25%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$38,461.96	34.05%	\$38,744.90	34.30%	\$74,206.48	65.70%	\$112,951.38
BUSINESS SUPPORT SERVICES	\$512,872.81	2.25%	\$28,111.75	0.12%	\$939,397.27	4.11%	\$0.00	0.00%	\$2,028,753.74	8.89%	\$3,509,135.57	15.37%	\$19,320,623.75	84.63%	\$22,829,759.32
CATS	\$135,263.54	0.23%	\$404,165.94	0.68%	\$0.00	0.00%	\$0.00	0.00%	\$1,112,490.09	1.88%	\$1,651,919.57	2.79%	\$57,617,333.38	97.21%	\$59,269,252.95
CDOT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$166,026.59	47.23%	\$166,026.59	47.23%	\$185,535.76	52.77%	\$351,562.35
CITY ATTORNEY	\$387.49	0.54%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$104.50	0.15%	\$491.99	0.69%	\$71,133.94	99.31%	\$71,625.93
CITY CLERK	\$354.17	0.70%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$82.50	0.16%	\$436.67	0.86%	\$50,232.92	99.14%	\$50,669.59
CITY MANAGER	\$25,584.90	0.94%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$27,515.58	1.02%	\$53,100.48	1.96%	\$2,655,575.70	98.04%	\$2,708,676.18
CMUD	\$1,267,743.85	1.30%	\$1,962,866.60	2.01%	\$1,261,675.96	1.29%	\$4,572.00	0.00%	\$5,781,458.43	5.92%	\$10,278,316.84	10.52%	\$87,400,091.49	89.48%	\$97,678,408.33
ECONOMIC DEVELOPMENT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$235,930.00	100.00%	\$235,930.00
ENGINEERING & PROPERTY MANAGEMENT	\$4,057,945.31	3.99%	\$487,145.90	0.48%	\$3,198,190.32	3.15%	\$4,126,477.54	4.06%	\$9,504,603.72	9.35%	\$21,374,362.79	21.02%	\$80,297,647.25	78.98%	\$101,672,010.04
FINANCE	\$728.48	0.02%	\$16,440.00	0.46%	\$0.00	0.00%	\$0.00	0.00%	\$440,387.78	12.36%	\$457,556.26	12.84%	\$3,106,090.23	87.16%	\$3,563,646.49
FIRE	\$3,956.90	0.20%	\$1,402.00	0.07%	\$528.00	0.03%	\$53.00	0.00%	\$44,220.02	2.24%	\$50,159.92	2.54%	\$1,928,321.27	97.46%	\$1,978,481.19
HUMAN RESOURCES	\$997.00	0.29%	\$750.00	0.22%	\$0.00	0.00%	\$0.00	0.00%	\$7,214.13	2.13%	\$8,961.13	2.64%	\$330,076.30	97.36%	\$339,037.43
MAYOR & CITY COUNCIL	\$2,256.50	4.03%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$643.31	1.15%	\$2,899.81	5.18%	\$53,084.04	94.82%	\$55,983.85
NEIGHBORHOOD DEVELOPMENT	\$1,729,706.22	20.35%	\$1,165.00	0.01%	\$7,600.00	0.09%	\$0.00	0.00%	\$217,596.42	2.56%	\$1,956,067.64	23.02%	\$6,542,581.00	76.98%	\$8,498,648.64
PLANNING COMMISSION	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$97,165.99	100.00%	\$97,165.99
POLICE	\$743,741.26	5.54%	\$6,307.00	0.05%	\$20,945.40	0.16%	\$356.90	0.00%	\$874,417.22	6.52%	\$1,645,767.78	12.27%	\$11,769,475.24	87.73%	\$13,415,243.02
SOLID WASTE SERVICES	\$83,496.23	0.63%	\$7,630.00	0.06%	\$13,520.17	0.10%	\$0.00	0.00%	\$247,433.07	1.88%	\$352,079.47	2.67%	\$12,827,248.43	97.33%	\$13,179,327.90
TRAINING TEAM	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,900.00	57.90%	\$6,900.00	57.90%	\$5,017.05	42.10%	\$11,917.05
TRANSPORTATION	\$95,456.68	0.93%	\$261,229.45	2.54%	\$88,488.00	0.86%	\$47,942.24	0.47%	\$466,542.47	4.54%	\$959,658.84	9.33%	\$9,323,531.23	90.67%	\$10,283,190.07
UNKNOWN	\$1,304,501.90	4.24%	\$191,302.28	0.62%	\$307,829.76	1.00%	\$103,098.96	0.34%	\$1,478,665.48	4.81%	\$3,385,398.38	11.01%	\$27,375,029.74	88.99%	\$30,760,428.12
Total	\$10,695,939.95	2.59%	\$3,495,465.92	0.85%	\$5,876,271.20	1.42%	\$4,473,524.04	1.08%	\$24,731,142.54	5.99%	\$49,272,343.65	11.94%	\$363,564,501.63	88.06%	\$412,836,845.28

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-68
OTHER SERVICES PRIME CONSULTANTS UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
NOT CLASSIFIED	\$9,799,474.93	2.75%	\$2,980,191.14	0.84%	\$4,970,138.18	1.40%	\$4,431,665.04	1.24%	\$19,378,598.08	5.44%	\$41,560,067.37	11.67%	\$314,615,756.24	88.33%	\$356,175,823.61
EQUIP RENTAL	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,897.00	7.26%	\$13,897.00	7.26%	\$177,485.28	92.74%	\$191,382.28
JAN & MAINT SVCS	\$141,124.30	1.32%	\$440.00	0.00%	\$880,041.58	8.20%	\$0.00	0.00%	\$242,135.44	2.26%	\$1,263,741.32	11.78%	\$9,465,942.82	88.22%	\$10,729,684.14
LANDFILL SVCS	\$1,150.50	0.01%	\$337.50	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$206,874.15	1.61%	\$208,362.15	1.63%	\$12,606,185.88	98.37%	\$12,814,548.03
LAUNDRY & CLEANING	\$503.71	0.74%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$503.71	0.74%	\$67,789.74	99.26%	\$68,293.45
MAINT & REPARIS	\$144,203.53	1.06%	\$510,247.28	3.75%	\$17,247.55	0.13%	\$4,127.00	0.03%	\$510,770.44	3.76%	\$1,186,595.80	8.72%	\$12,414,248.94	91.28%	\$13,600,844.74
PRINTING	\$279,839.56	6.38%	\$0.00	0.00%	\$8,097.76	0.18%	\$37,732.00	0.86%	\$341,893.73	7.79%	\$667,563.05	15.22%	\$3,718,791.69	84.78%	\$4,386,354.74
REAL PROP	\$158,965.95	27.40%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,460.00	1.46%	\$167,425.95	28.86%	\$412,675.67	71.14%	\$580,101.62
SECURITY SVCS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,601.65	7.86%	\$6,601.65	7.86%	\$77,406.27	92.14%	\$84,007.92
SPEC DEPT SUPPLIES	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,130.89	100.00%	\$8,130.89
SUBSIS, CARE & SUPPORT	\$1,491.00	0.51%	\$3,690.00	1.26%	\$0.00	0.00%	\$0.00	0.00%	\$29,647.00	10.16%	\$34,828.00	11.94%	\$256,896.95	88.06%	\$291,724.95
TECH SVCS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,099.47	100.00%	\$13,099.47
TELECOMMUNICATIONS	\$166,819.52	25.76%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,035.93	2.48%	\$182,855.45	28.24%	\$464,627.38	71.76%	\$647,482.83
TEMP HELP	\$2,366.95	0.02%	\$560.00	0.00%	\$746.13	0.01%	\$0.00	0.00%	\$3,976,229.12	30.02%	\$3,979,902.20	30.05%	\$9,265,464.41	69.95%	\$13,245,366.61
Total	\$10,695,939.95	2.59%	\$3,495,465.92	0.85%	\$5,876,271.20	1.42%	\$4,473,524.04	1.08%	\$24,731,142.54	5.99%	\$49,272,343.65	11.94%	\$363,564,501.63	88.06%	\$412,836,845.28

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

² Not Classified Other Services include account code descriptions ("service contracts", "fees - other" and "Other Contractual Services")

**EXHIBIT 4-69
OTHER SERVICES PRIME CONSULTANTS UTILIZATION # OF POS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's Awarded	Total Avail MWBEs
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	#
NOT CLASSIFIED	890	1.78%	322	0.65%	168	0.34%	114	0.23%	2,473	4.96%	3,967	7.96%	45,900	92.04%	49,867	
EQUIP RENTAL	0	0.00%	0	0.00%	0	0.00%	0	0.00%	239	16.88%	239	16.88%	1,177	83.12%	1,416	76
JAN & MAINT SVCS	109	0.88%	1	0.01%	1	0.01%	0	0.00%	306	2.47%	417	3.36%	11,983	96.64%	12,400	22
LANDFILL SVCS	1	0.12%	1	0.12%	0	0.00%	0	0.00%	60	7.16%	62	7.40%	776	92.60%	838	3
LAUNDRY & CLEANING	3	0.57%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	0.57%	527	99.43%	530	3
MAINT & REPARIS	34	0.35%	109	1.13%	0	0.00%	2	0.02%	281	2.92%	426	4.42%	9,208	95.58%	9,634	411
PRINTING	79	1.55%	0	0.00%	14	0.27%	4	0.08%	275	5.39%	372	7.29%	4,733	92.71%	5,105	0
REAL PROP	18	22.22%	0	0.00%	0	0.00%	0	0.00%	4	4.94%	22	27.16%	59	72.84%	81	0
SECURITY SVCS	0	0.00%	0	0.00%	0	0.00%	0	0.00%	10	6.99%	10	6.99%	133	93.01%	143	12
SPEC DEPT SUPPLIES	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	10	100.00%	10	27
SUBSIS, CARE & SUPPORT	2	0.08%	9	0.38%	0	0.00%	0	0.00%	110	4.59%	121	5.05%	2,277	94.95%	2,398	0
TECH SVCS	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	9	100.00%	9	48
TELECOMMUNICATIONS	5	2.49%	0	0.00%	0	0.00%	0	0.00%	24	11.94%	29	14.43%	172	85.57%	201	17
TEMP HELP	0	0.00%	1	0.01%	0	0.00%	0	0.00%	4,019	55.18%	4,020	55.19%	3,264	44.81%	7,284	2
Total	1,141	1.27%	443	0.49%	183	0.20%	120	0.13%	7,801	8.68%	9,688	10.77%	80,228	89.23%	89,916	621

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total PO's awarded annually to prime contractors.

² Not Classified Other Services include account code descriptions ("service contracts", "fees - other" and "Other Contractual Services")

4.7.1 Relevant Market Area Analysis

As discussed in section 4.1.4 the relevant market area is determined by first summing the dollars awarded in each county according to business category. The counties were listed according to the number of firms awarded contract dollars, and then by the dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

Over \$292 million were spent by the City of Charlotte on Goods and Supplies procurements. This amount represents 183,880 payments made to 4,681 vendors. The relevant market area represented just over 75 percent of the overall dollars, or \$220 million. About 44 percent of the payments were made to vendors in Mecklenburg County, North Carolina. In addition to Mecklenburg County, 52 other counties were determined to be in the relevant market area (counties in which at least 75 percent of contract dollars were spent). **Exhibit 4-70** shows the location of all firms by county and dollar amount.

4.7.2 Utilization Analysis

M/WBE and non-M/WBE utilization analysis includes the firms located within the relevant market areas. The utilization was derived from information contained in the City's financial system for activity occurring between January 1, 1998, and December 31, 2002. Using this data source, MGT calculated the percentage of total dollars awarded to M/WBEs and non-M/WBEs during the relevant time period. The numbers in the utilization charts to follow reflect the combined purchase orders for each business category. The number of actual contracts may vary slightly from the number of purchase orders in cases where multiple POs were let on a single contract.

**EXHIBIT 4-70
GOODS AND SUPPLIES
RELEVANT MARKET AREA ANALYSIS
CALENDAR YEARS 1998 THROUGH 2002**

County, ¹ State	# of Contracts	% of Contracts	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum % ²
MECKLENBURG, NC	97,266	52.90%	1,748	37.34%	\$128,500,420.36	43.99%	43.99%
COOK, IL	2,424	1.32%	135	2.88%	\$8,360,760.71	2.86%	46.85%
WAKE, NC	1,910	1.04%	110	2.35%	\$5,085,069.73	1.74%	48.59%
FULTON, GA	8,230	4.48%	103	2.20%	\$7,164,812.26	2.45%	51.04%
GUILFORD, NC	3,255	1.77%	84	1.79%	\$8,502,661.44	2.91%	53.95%
GASTON, NC	2,013	1.09%	72	1.54%	\$8,920,012.32	3.05%	57.01%
UNION, NC	981	0.53%	67	1.43%	\$3,019,760.31	1.03%	58.04%
DALLAS, TX	1,105	0.60%	59	1.26%	\$2,364,208.37	0.81%	58.85%
CABARRUS, NC	1,471	0.80%	58	1.24%	\$794,913.70	0.27%	59.12%
LOS ANGELES, CA	515	0.28%	54	1.15%	\$513,801.48	0.18%	59.30%
YORK, SC	1,158	0.63%	46	0.98%	\$988,806.54	0.34%	59.64%
IREDELL, NC	1,043	0.57%	37	0.79%	\$1,546,527.87	0.53%	60.17%
PHILADELPHIA, PA	344	0.19%	34	0.73%	\$4,686,736.37	1.60%	61.77%
GWINNETT, GA	403	0.22%	33	0.70%	\$1,683,571.08	0.58%	62.35%
LINCOLN, NC	508	0.28%	30	0.64%	\$2,323,398.02	0.80%	63.14%
RICHLAND, SC	3,549	1.93%	27	0.58%	\$3,560,752.45	1.22%	64.36%
MIDDLESEX, MA	109	0.06%	27	0.58%	\$233,899.52	0.08%	64.44%
HARRIS, TX	122	0.07%	27	0.58%	\$194,302.51	0.07%	64.51%
FORSYTH, NC	21,584	11.74%	26	0.56%	\$12,508,840.44	4.28%	68.79%
HENNEPIN, MN	242	0.13%	26	0.56%	\$523,879.70	0.18%	68.97%
ORANGE, CA	93	0.05%	26	0.56%	\$287,202.68	0.10%	69.07%
ALLEGHENY, PA	328	0.18%	23	0.49%	\$305,040.25	0.10%	69.17%
SAN DIEGO, CA	85	0.05%	22	0.47%	\$3,699,426.50	1.27%	70.44%
FAIRFAX, VA	149	0.08%	21	0.45%	\$296,095.49	0.10%	70.54%
MARICOPA, AZ	159	0.09%	21	0.45%	\$112,133.88	0.04%	70.58%
KING, WA	59	0.03%	20	0.43%	\$3,722,317.02	1.27%	71.85%
GREENVILLE, SC	1,054	0.57%	20	0.43%	\$827,027.58	0.28%	72.14%
MILWAUKEE, WI	103	0.06%	20	0.43%	\$156,105.70	0.05%	72.19%
BROWARD, FL	160	0.09%	20	0.43%	\$138,136.07	0.05%	72.24%
DURHAM, NC	153	0.08%	19	0.41%	\$1,034,026.34	0.35%	72.59%
ORANGE, NC	392	0.21%	19	0.41%	\$500,065.03	0.17%	72.76%
DU PAGE, IL	151	0.08%	19	0.41%	\$212,260.72	0.07%	72.83%
WAYNE, MI	290	0.16%	18	0.38%	\$366,077.38	0.13%	72.96%
SUFFOLK, MA	65	0.04%	18	0.38%	\$329,947.24	0.11%	73.07%
HAMILTON, OH	1,631	0.89%	18	0.38%	\$284,831.51	0.10%	73.17%
SANTA CLARA, CA	52	0.03%	18	0.38%	\$76,548.75	0.03%	73.20%
WASHINGTON, DC	28	0.02%	18	0.38%	\$49,989.04	0.02%	73.21%
NASSAU, NY	375	0.20%	17	0.36%	\$368,390.14	0.13%	73.34%
ALAMANCE, NC	247	0.13%	17	0.36%	\$353,060.22	0.12%	73.46%
CUYAHOGA, OH	337	0.18%	17	0.36%	\$202,101.66	0.07%	73.53%
CATAWBA, NC	151	0.08%	16	0.34%	\$592,158.57	0.20%	73.73%
DE KALB, GA	229	0.12%	16	0.34%	\$142,296.33	0.05%	73.78%
COBB, GA	85	0.05%	15	0.32%	\$731,835.24	0.25%	74.03%
FRANKLIN, OH	83	0.05%	15	0.32%	\$125,452.02	0.04%	74.07%
BALTIMORE (CITY), MD	164	0.09%	15	0.32%	\$82,337.12	0.03%	74.10%
FAIRFIELD, CT	61	0.03%	15	0.32%	\$50,786.69	0.02%	74.12%
HILLSBOROUGH, FL	57	0.03%	15	0.32%	\$41,658.47	0.01%	74.13%
ORANGE, FL	224	0.12%	14	0.30%	\$361,974.59	0.12%	74.26%
MONTGOMERY, MD	86	0.05%	14	0.30%	\$107,487.90	0.04%	74.29%
LAKE, IL	104	0.06%	14	0.30%	\$95,895.55	0.03%	74.33%
ESSEX, NJ	142	0.08%	14	0.30%	\$73,811.30	0.03%	74.35%
JEFFERSON, AL	549	0.30%	13	0.28%	\$1,454,540.48	0.50%	74.85%
HARTFORD, CT	164	0.09%	13	0.28%	\$1,010,088.57	0.35%	75.20%
RELEVANT M.A. TOTAL	156,242	84.97%	3,383	72.27%	\$219,668,241.21	75.20%	N/A
ERIE, NY	97	0.05%	13	0.28%	\$197,188.16	0.07%	75.26%
SUFFOLK, NY	98	0.05%	13	0.28%	\$110,916.08	0.04%	75.30%
MARION, IN	68	0.04%	13	0.28%	\$63,575.61	0.02%	75.32%
MONTGOMERY, PA	71	0.04%	11	0.23%	\$65,435.25	0.02%	75.35%
DANE, WI	25	0.01%	11	0.23%	\$47,574.95	0.02%	75.36%
BERGEN, NJ	44	0.02%	11	0.23%	\$28,402.44	0.01%	75.37%
PIMA, AZ	24	0.01%	11	0.23%	\$13,479.89	0.00%	75.38%
OTHER	27,211	14.80%	1,215	25.96%	\$71,932,923.37	24.62%	100.00%
Total	183,880	100.00%	4,681	100.00%	\$292,127,736.96	100.00%	

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Counties above the line are included in the relevant market area.

² Cumulative total of percentage of dollars in market area.

This section discusses the analysis of the utilization of Goods and Supplies vendors located in the relevant market areas by the City during the study period. This analysis consists of an examination of the dollar amounts associated with goods and supplies payments, by race/ethnicity/gender classifications, between the calendar years of 1998 and 2002. **Exhibit 4-71** presents the utilization analysis of M/WBEs in the relevant market areas. As the exhibit shows, about 7 percent of the Goods and Supplies purchases made during the study period were with M/WBE firms. Conversely, nonminority firms represented almost 93 percent of the Goods and Supplies payments. In dollar terms, nonminority-owned Goods and Supplies vendors received approximately \$204 million in business from the City compared to approximately \$15 million in business conducted with M/WBEs. A list of Goods and Supplies contracts/payments analyzed is shown in Appendix Q.

The utilization of city certified firms in Goods and Supplies is shown in **Appendix F, Exhibits F-11 and F-12.**

The total number of Goods and Supplies purchase orders/payments made to firms in the relevant market area is shown in **Exhibit 4-72.** Eleven percent of these purchases were to M/WBE vendors. African American firms received the most contracts with 630 and nonminority women received the most contracts with for the M/WBE firms, with 569. **Exhibit 4-73** shows the number of unique utilized vendors for Goods and Supplies procurements. About 6 percent of the firms utilized were M/WBEs. Hispanic American-, Asian American-, and Native American-owned firms combined make up less than 1 percent of the utilized firms.

**EXHIBIT 4-71
GOODS AND SUPPLIES
UTILIZATION ANALYSIS OF VENDORS IN THE RELEVANT MARKET AREA
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998	\$888,732.65	2.30%	\$233,237.53	0.60%	\$646,285.98	1.67%	\$2,041.97	0.01%	\$771,816.22	2.00%	\$2,542,114.35	6.58%	\$36,064,439.26	93.42%	\$38,606,553.61
1999	\$1,012,235.50	3.19%	\$179,833.01	0.57%	\$1,616,320.75	5.09%	\$2,367.26	0.01%	\$1,476,022.80	4.65%	\$4,286,779.32	13.51%	\$27,455,351.77	86.49%	\$31,742,131.09
2000	\$442,292.46	0.98%	\$58,707.21	0.13%	\$464,271.94	1.03%	\$19,127.32	0.04%	\$729,652.25	1.62%	\$1,714,051.18	3.80%	\$43,369,967.99	96.20%	\$45,084,019.17
2001	\$867,543.32	1.48%	\$153,711.58	0.26%	\$797,596.26	1.36%	\$24,394.83	0.04%	\$1,033,848.97	1.77%	\$2,877,094.96	4.92%	\$55,557,044.01	95.08%	\$58,434,138.97
2002	\$1,664,005.36	3.63%	\$83,175.08	0.18%	\$518,771.26	1.13%	\$33,723.90	0.07%	\$1,737,906.21	3.79%	\$4,037,581.81	8.82%	\$41,763,816.56	91.18%	\$45,801,398.37
Total	\$4,874,809.29	2.22%	\$708,664.41	0.32%	\$4,043,246.19	1.84%	\$81,655.28	0.04%	\$5,749,246.45	2.62%	\$15,457,621.62	7.04%	\$204,210,619.59	92.96%	\$219,668,241.21

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-72
GOODS AND SUPPLIES
NUMBER OF CONTRACTS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total POs
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	141	3.72%	13	0.34%	55	1.45%	1	0.03%	184	4.86%	394	10.40%	3,393	89.60%	3,787
1999	186	4.82%	21	0.54%	46	1.19%	1	0.03%	163	4.22%	417	10.80%	3,443	89.20%	3,860
2000	128	4.99%	4	0.16%	25	0.97%	1	0.04%	108	4.21%	266	10.37%	2,300	89.63%	2,566
2001	76	5.86%	1	0.08%	16	1.23%	0	0.00%	58	4.47%	151	11.64%	1,146	88.36%	1,297
2002	99	9.14%	2	0.18%	4	0.37%	0	0.00%	56	5.17%	161	14.87%	922	85.13%	1,083
Total PO's	630	5.00%	41	0.33%	146	1.16%	3	0.02%	569	4.52%	1,389	11.03%	11,204	88.97%	12,593

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of Total POs

**EXHIBIT 4-73
GOODS AND SUPPLIES
NUMBER OF UNIQUE VENDORS UTILIZED
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Calendar Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#
1998	19	1.44%	4	0.30%	7	0.53%	2	0.15%	56	4.23%	88	6.65%	1,235	93.35%	1,323
1999	18	1.27%	5	0.35%	8	0.56%	2	0.14%	54	3.81%	87	6.14%	1,329	93.86%	1,416
2000	22	1.38%	4	0.25%	6	0.38%	3	0.19%	54	3.39%	89	5.59%	1,502	94.41%	1,591
2001	28	1.69%	6	0.36%	7	0.42%	1	0.06%	63	3.80%	105	6.34%	1,552	93.66%	1,657
2002	20	1.27%	7	0.44%	6	0.38%	2	0.13%	57	3.62%	92	5.84%	1,484	94.16%	1,576
Total Unique Vendors Over Five Years ²	53	1.57%	10	0.30%	15	0.44%	5	0.15%	122	3.61%	205	6.07%	3,175	93.93%	3,380

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of Total Vendors.

² The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

4.7.3 Availability

As stated in sections 4.1.3 and 4.1.6 availability for goods and supplies was derived from those firms (1) have provides goods and supplies for the City in the past; (2) have submitted bids for goods and supplies for the City in the past; (3) have registered with any of the City's KBUs as a supplier of goods and supplies; (4) are registered with any of the agencies listed in section 4.1.3 and it could be determined that they were goods and supplies providers, or (5) they provided or bid on goods and supplies for Mecklenburg County or Charlotte-Mecklenburg Schools.

Exhibit 4-74 shows the availability of goods and supplies vendors. Approximately 8 percent of the vendors available to do business with the City were M/WBEs. The majority of the M/WBE firms were African American (3.29 percent) and nonminority woman-owned firms (3.62 percent).

4.7.4 Goods and Supplies Analysis by City Key Business Unit

The analyses for Goods and Supplies contracts by City Department or Key Business Unit is shown below. Each payment made on behalf of a department is Goods and Supplies related purchases was counted in this analysis. In **Exhibit 4-75**, there is a breakdown of dollars paid to each ethnicity group of vendors by each department. The KBUs with the largest dollars spent on Goods and Supplies were the Police and CMUD. The KBUs with the largest percentage of M/WBE utilization were Budget and Evaluation and City Clerk.

4.7.5 Goods and Supplies Decomposition

MGT was able to further break down the payments to goods and supplies vendors into 16 subcategories (Autos and Equipment, Chemicals and Lab Supplies, Construction Materials and Supplies, Equipment Parts and Supplies, Equipment Rental, Fuels and

**EXHIBIT 4-74
GOODS AND SUPPLIES
AVAILABILITY OF PRIME VENDORS
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Total	195	3.29%	28	0.47%	44	0.74%	15	0.25%	215	3.62%	497	8.38%	5,435	91.62%	5,932

Source: MGT's master vendor database.

¹ Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-75
GOODS AND SUPPLIES
UTILIZATION ANALYSIS OF PRIME CONTRACTORS BY DEPARTMENT
IN THE RELEVANT MARKET AREA BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
AVIATION	\$5,203.94	0.03%	\$120,304.09	0.63%	\$1,386,763.42	7.24%	\$11,919.30	0.06%	\$322,869.96	1.68%	\$1,847,060.71	9.64%	\$17,316,574.94	90.36%	\$19,163,635.65
BUDGET & EVALUATION	\$36,467.54	44.15%	\$135.00	0.16%	\$0.00	0.00%	\$0.00	0.00%	\$2,438.57	2.95%	\$39,041.11	47.26%	\$43,561.45	52.74%	\$82,602.56
BUSINESS SUPPORT SERV	\$1,723,972.15	9.02%	\$1,030.00	0.01%	\$298,670.27	1.56%	\$0.00	0.00%	\$757,054.88	3.96%	\$2,780,727.30	14.55%	\$16,336,723.63	85.45%	\$19,117,450.93
CATS	\$537,206.26	2.85%	\$3,737.68	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$65,568.11	0.35%	\$606,512.05	3.22%	\$18,246,750.90	96.78%	\$18,853,262.95
CITY ATTORNEY	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,433.89	2.87%	\$1,433.89	2.87%	\$48,511.68	97.13%	\$49,945.57
CITY CLERK	\$6,195.82	13.99%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,250.94	2.82%	\$7,446.76	16.82%	\$36,834.96	83.18%	\$44,281.72
CITY MANAGER	\$37,094.80	2.81%	\$850.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$35,500.97	2.69%	\$73,445.77	5.56%	\$1,247,488.08	94.44%	\$1,320,933.85
CMUD	\$529,434.19	1.43%	\$498,028.89	1.34%	\$10,663.84	0.03%	\$521.97	0.00%	\$1,828,577.65	4.92%	\$2,867,226.54	7.72%	\$34,279,523.02	92.28%	\$37,146,749.56
ENGINEERING & PROPERT	\$245,906.37	1.05%	\$3,235.96	0.01%	\$15,313.99	0.07%	\$62,970.63	0.27%	\$1,064,332.16	4.53%	\$1,391,759.11	5.92%	\$22,122,970.29	94.08%	\$23,514,729.40
FINANCE	\$110,443.02	6.98%	\$1,240.00	0.08%	\$0.00	0.00%	\$0.00	0.00%	\$19,219.78	1.22%	\$130,902.80	8.28%	\$1,450,857.90	91.72%	\$1,581,760.70
FIRE	\$146,627.59	1.34%	\$18,311.06	0.17%	\$817.72	0.01%	\$0.00	0.00%	\$237,771.08	2.17%	\$403,527.45	3.69%	\$10,544,052.16	96.31%	\$10,947,579.61
HUMAN RESOURCES	\$19,690.03	0.55%	\$540.00	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$7,491.03	0.21%	\$27,721.06	0.78%	\$3,543,806.47	99.22%	\$3,571,527.53
MAYOR & CITY COUNCIL	\$958.00	1.43%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,632.70	3.93%	\$3,590.70	5.37%	\$63,327.90	94.63%	\$66,918.60
NEIGHBORHOOD DEVELOP	\$8,579.99	1.71%	\$435.00	0.09%	\$20.00	0.00%	\$0.00	0.00%	\$21,863.75	4.35%	\$30,898.74	6.15%	\$471,804.02	93.85%	\$502,702.76
POLICE	\$749,608.49	1.82%	\$29,540.23	0.07%	\$476.00	0.00%	\$11.00	0.00%	\$352,026.37	0.86%	\$1,131,662.09	2.75%	\$40,017,436.33	97.25%	\$41,149,098.42
SOLID WASTE SERVICES	\$18,480.49	0.19%	\$135.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$30,909.23	0.32%	\$49,524.72	0.52%	\$9,560,877.61	99.48%	\$9,610,402.33
TRANSPORTATION	\$69,245.02	0.97%	\$940.00	0.01%	\$696.00	0.01%	\$0.00	0.00%	\$277,422.07	3.87%	\$348,303.09	4.86%	\$6,812,575.74	95.14%	\$7,160,878.83
UNKNOWN	\$629,695.59	2.44%	\$30,201.50	0.12%	\$2,329,824.95	9.04%	\$6,232.38	0.02%	\$720,883.31	2.80%	\$3,716,837.73	14.42%	\$22,066,942.51	85.58%	\$25,783,780.24
Total	\$4,874,809.29	2.22%	\$708,664.41	0.32%	\$4,043,246.19	1.84%	\$81,655.28	0.04%	\$5,749,246.45	2.62%	\$15,457,621.62	7.04%	\$204,210,619.59	92.96%	\$219,668,241.21

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002.

¹ Percentage of total dollars awarded annually to prime contractors.

Lubricants, Janitorial and Cleaning Supplies, Office Equipment, Office Supplies, Radio Equipment, Special Department Supplies, Technical Supplies, Tires and Tubes, Traffic Signals, Uniforms, and Not Classified). The analyses are shown in **Exhibits 4-76 and 4-77**. The office equipment category had the highest percent utilization of M/WBEs (60%) due to the high utilization of nonminority women. While the overall M/WBE utilization was seven percent, this varied considerably when decomposed from zero for autos and equipment and traffic signals to 60 percent for office equipment.

4.8 Conclusions

Exhibits 4-78 through **4-80** provide a summary of the utilization and availability of M/WBEs by Business Category from calendar years 1998 to 2002. The availability and utilization are displayed for each of the race/ethnicity/gender categories by business type. **Exhibit 4-78** shows the utilization as a percentage of total market area dollars, **Exhibit 4-79** shows the utilization in terms of actual market area dollars, and **Exhibit 4-80** shows the availability percentages.

For Construction contracts, the dollar amounts awarded to M/WBEs were much less than those of nonminority-owned firms. As noted earlier in this chapter, less than 15 percent of the total dollars awarded for prime construction projects went to M/WBEs.

The majority of Architectural and Engineering services contracts were awarded to nonminority firms. Approximately 10 percent of the prime contract dollar amount was awarded to M/WBEs. However, M/WBEs represented about 16 percent of the available vendors to provide A & E services.

**EXHIBIT 4-76
GOODS AND SUPPLIES UTILIZATION
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded	Total Avail MWBEs
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	#
NOT CLASSIFIED	\$36,014.00	0.20%	\$0.00	0.00%	\$755,000.00	4.18%	\$0.00	0.00%	\$133,795.00	0.74%	\$924,809.00	5.11%	\$17,158,988.68	94.89%	\$18,083,797.68	
AUTOS & EQUIP	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$49,704,357.12	100.00%	\$49,704,357.12	11
CHEM & LAB SUPPLIES	\$4,201.29	0.05%	\$8,195.00	0.09%	\$0.00	0.00%	\$0.00	0.00%	\$49,364.99	0.57%	\$61,761.28	0.71%	\$8,644,413.61	99.29%	\$8,706,174.89	24
CON MAT & SUPP	\$373,534.77	1.57%	\$482,453.67	2.03%	\$21,413.88	0.09%	\$1,862.45	0.01%	\$1,089,790.11	4.58%	\$1,969,054.88	8.27%	\$21,835,126.74	91.73%	\$23,804,181.62	101
EQUIP PARTS AND SUPPLIES	\$847,660.35	3.80%	\$88,407.58	0.40%	\$2,590,312.32	11.60%	\$76,599.03	0.34%	\$155,813.20	0.70%	\$3,758,792.48	16.83%	\$18,574,959.19	83.17%	\$22,333,751.67	76
EQUIP RENTAL	\$0.00	0.00%	\$430.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$27,455.72	0.71%	\$27,885.72	0.72%	\$3,858,124.72	99.28%	\$3,886,010.44	0
FUELS & LUBRICANTS	\$90.71	0.00%	\$0.00	0.00%	\$26,237.46	0.15%	\$1,655.00	0.01%	\$509,959.71	2.93%	\$537,942.88	3.09%	\$16,865,694.26	96.91%	\$17,403,637.14	6
JAN & CLEAN SUPPLIES	\$8,779.92	0.39%	\$0.00	0.00%	\$614.67	0.03%	\$7.80	0.00%	\$27,871.35	1.23%	\$37,273.74	1.64%	\$2,232,160.81	98.36%	\$2,269,434.55	10
OFFICE EQUIP	\$34,161.22	2.70%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$729,105.00	57.59%	\$763,266.22	60.29%	\$502,807.60	39.71%	\$1,266,073.82	22
OFFICE SUPPLIES	\$117,030.04	0.51%	\$1,240.00	0.01%	\$535,566.65	2.36%	\$1,520.00	0.01%	\$2,098,707.62	9.23%	\$2,754,064.31	12.12%	\$19,972,250.47	87.88%	\$22,726,314.78	34
RADIO EQUIP	\$12,147.14	0.26%	\$600.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,747.14	0.27%	\$4,716,298.62	99.73%	\$4,729,045.76	0
SPEC DEPT SUPPLIES	\$2,065,220.73	6.80%	\$48,675.01	0.16%	\$87,173.66	0.29%	\$0.00	0.00%	\$799,903.53	2.63%	\$3,000,972.93	9.88%	\$27,379,370.67	90.12%	\$30,380,343.60	27
TECH SUPPLIES	\$1,345,724.69	18.44%	\$78,663.15	1.08%	\$813.21	0.01%	\$0.00	0.00%	\$62,169.31	0.85%	\$1,487,370.36	20.39%	\$5,808,511.66	79.61%	\$7,295,882.02	8
TIRES AND TUBES	\$0.00	0.00%	\$0.00	0.00%	\$2,326.24	0.18%	\$0.00	0.00%	\$0.00	0.00%	\$2,326.24	0.18%	\$1,267,276.38	99.82%	\$1,269,602.62	1
TRAFFIC SIGNALS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$290,261.16	100.00%	\$290,261.16	15
UNIFORMS	\$30,244.43	0.55%	\$0.00	0.00%	\$23,788.10	0.43%	\$11.00	0.00%	\$65,310.91	1.18%	\$119,354.44	2.16%	\$5,400,017.90	97.84%	\$5,519,372.34	9
Total	\$4,874,809.29	2.22%	\$708,664.41	0.32%	\$4,043,246.19	1.84%	\$81,655.28	0.04%	\$5,749,246.45	2.62%	\$15,457,621.62	7.04%	\$204,210,619.59	92.96%	\$219,668,241.21	344

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total dollars awarded annually to prime contractors.

² Not Classified Goods & Supplies include account code descriptions ("fees - other" and "Steel Procurements")

**EXHIBIT 4-77
GOODS AND SUPPLIES UTILIZATION # OF POs
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS
CALENDAR YEARS 1998 THROUGH 2002**

WORK CATEGORY ²	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total PO's Awarded	Total Avail M/WBEs
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	#
NOT CLASSIFIED	1	1.61%	0	0.00%	1	1.61%	0	0.00%	2	3.23%	4	6.45%	58	93.55%	62	
AUTOS & EQUIP	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	599	100.00%	599	11
CHEM & LAB SUPPLIES	8	0.20%	3	0.08%	0	0.00%	0	0.00%	92	2.32%	103	2.59%	3,870	97.41%	3,973	24
CON MAT & SUPP	937	3.43%	209	0.76%	17	0.06%	13	0.05%	1,366	5.00%	2,542	9.30%	24,803	90.70%	27,345	101
EQUIP PARTS AND SUPPLIES	323	1.55%	19	0.09%	691	3.32%	408	1.96%	505	2.43%	1,946	9.35%	18,876	90.65%	20,822	76
EQUIP RENTAL	0	0.00%	1	0.02%	0	0.00%	0	0.00%	34	0.70%	35	0.72%	4,827	99.28%	4,862	0
FUELS & LUBRICANTS	1	0.00%	0	0.00%	4	0.01%	1	0.00%	374	1.37%	380	1.39%	26,866	98.61%	27,246	6
JAN & CLEAN SUPPLIES	5	0.18%	0	0.00%	2	0.07%	1	0.04%	46	1.66%	54	1.94%	2,725	98.06%	2,779	10
OFFICE EQUIP	15	17.44%	0	0.00%	0	0.00%	0	0.00%	4	4.65%	19	22.09%	67	77.91%	86	22
OFFICE SUPPLIES	641	1.41%	1	0.00%	780	1.72%	1	0.00%	2,033	4.47%	3,456	7.60%	42,015	92.40%	45,471	34
RADIO EQUIP	11	21.15%	1	1.92%	0	0.00%	0	0.00%	0	0.00%	12	23.08%	40	76.92%	52	0
SPEC DEPT SUPPLIES	625	4.81%	36	0.28%	28	0.22%	0	0.00%	535	4.11%	1,224	9.41%	11,779	90.59%	13,003	27
TECH SUPPLIES	111	8.53%	50	3.84%	1	0.08%	0	0.00%	17	1.31%	179	13.76%	1,122	86.24%	1,301	8
TIRES AND TUBES	0	0.00%	0	0.00%	1	0.45%	0	0.00%	0	0.00%	1	0.45%	219	99.55%	220	1
TRAFFIC SIGNALS	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	26	100.00%	26	15
UNIFORMS	34	0.41%	0	0.00%	38	0.45%	1	0.01%	34	0.41%	107	1.27%	8,288	98.73%	8,395	9
Total	2,712	1.74%	320	0.20%	1,563	1.00%	425	0.27%	5,042	3.23%	10,062	6.44%	146,180	93.56%	156,242	344

Source: MGT developed, and City of Charlotte verified, contract and vendor database from calendar years 1998 through 2002

¹ Percentage of total PO's awarded annually to prime contractors.

² Not Classified Goods & Supplies include account code descriptions ("fees - other" and "Steel Procurements")

**EXHIBIT 4-78
SUMMARY OF UTILIZATION PERCENTAGE OF DOLLARS
M/WBE AND NON-M/WBE FIRMS BY BUSINESS CATEGORY
STUDY YEARS 1998 THROUGH 2002**

Business Category	African American	Hispanic American	Asian American	Native American	Nonminority Women	Nonminority Firms
Construction Prime Contractors Less than \$30,000	6.24%	0.64%	1.17%	0.14%	10.46%	81.36%
Construction Prime Contractors Greater than or Equal to \$30,000	3.32%	0.04%	4.47%	0.28%	6.65%	85.23%
A & E Prime Consultants	0.10%	0.41%	1.25%	2.54%	5.74%	89.97%
Professional Services Prime Consultants	1.08%	0.68%	3.99%	1.55%	8.75%	83.96%
Other Services	2.59%	0.85%	1.42%	1.08%	5.99%	88.06%
Goods & Supplies Vendors	2.22%	0.32%	1.84%	0.04%	2.62%	92.96%

Source: Chapter 4 Analysis Results

**EXHIBIT 4-79
SUMMARY OF UTILIZATION DOLLARS
M/WBE AND NON-M/WBE FIRMS BY BUSINESS CATEGORY
STUDY YEARS 1998 THROUGH 2002**

Business Category	African American	Hispanic American	Asian American	Native American	Nonminority Women	Nonminority Firms
Construction Prime Contractors Less than \$30,000	\$1,297,269	\$132,602	\$243,376	\$28,150	\$2,174,080	\$16,914,208
Construction Prime Contractors Greater than or Equal to \$30,000	\$36,903,088	\$448,407	\$49,668,826	\$3,112,140	\$73,870,288	\$946,578,362
A & E Prime Consultants	\$99,702	\$425,338	\$1,310,016	\$2,653,975	\$5,994,994	\$94,015,407
Professional Services Prime Consultants	\$984,756	\$626,231	\$3,649,226	\$1,417,293	\$8,004,452	\$76,830,822
Other Services	\$10,695,939	\$3,495,465	\$5,876,271	\$4,473,524	\$24,731,142	\$363,514,501
Goods & Supplies Vendors	\$4,874,809	\$708,664	\$4,043,246	\$81,655	\$5,749,246	\$204,210,619

Source: Chapter 4 Analysis Results

**EXHIBIT 4-80
SUMMARY OF AVAILABILITY
M/WBE AND NON-M/WBE VENDORS
BY BUSINESS CATEGORY
STUDY YEARS 1998 THROUGH 2002**

Business Category	African American	Hispanic American	Asian American	Native American	Nonminority Women	Nonminority Firms
Construction Prime Contractors Less than \$30,000	8.55%	1.75%	0.82%	0.61%	7.16%	81.12%
Construction Prime Contractors Greater than or Equal to \$30,000	4.47%	1.00%	0.46%	0.30%	6.09%	87.68%
A & E Prime Consultants	3.02%	1.81%	2.29%	0.40%	8.51%	83.97%
Professional Services Prime Consultants	7.60%	1.15%	1.97%	0.82%	10.55%	77.92%
Other Services	5.60%	0.39%	0.46%	0.27%	4.71%	88.57%
Goods & Supplies Vendors	3.29%	0.47%	0.74%	0.25%	3.62%	91.62%

Source: Chapter 4 Analysis Results

The majority of Professional Services contracts were awarded to nonminority firms. Nearly 16 percent of the prime contract dollar amount was awarded to M/WBEs. M/WBEs represented about 22 percent of the available vendors to provide professional services.

M/WBEs were less successful as Other Services and Goods and Supplies vendors relative to the availability of firms in those respective business categories. For Other Services, M/WBEs were awarded nearly 12 percent of the procurement dollars. In the Goods and Supplies business category, M/WBEs consist of less than 8 percent of the available vendors and were awarded about 7 percent of the total dollars in this category.

The utilization and availability data presented in these exhibits are further analyzed in Chapter 5.0 of this report.

5.0 DISPARITY ANALYSIS

5.0 DISPARITY ANALYSIS

This chapter examines the issue of disparity within each business category of procurement. Disparity, in this context, is the analysis of the differences between the utilization of minority and woman-owned business enterprises (M/WBEs) and the availability of those firms in the marketplace. Accordingly, MGT used disparity indices to examine whether M/WBEs received a proportional share of dollars based on the availability of M/WBEs in the relevant market area.

This chapter consists of three sections:

- Section 5.1 describes the methodology used by MGT to test for the presence or absence of disparity in each of the business categories. The development and use of the disparity indices as well as corresponding t-tests are included in this section.
- Section 5.2 applies the disparity indices and t-tests to the business categories and determines the presence or absence of disparity in the City of Charlotte procurement activity.
- Section 5.3 provides the multivariate regression analysis.

5.1 Methodology

MGT used the availability and utilization information presented in Chapter 4.0 of this report as the basis to determine if M/WBEs received a proportional share of awards and other procurements by the City of Charlotte. This determination is made primarily through the disparity index calculation that compares the availability of firms with the utilization of those firms. The disparity index also provides a value that can be given a commonly accepted substantive interpretation.

The underlying assumption of this approach is that, absent discrimination, the proportion of dollars received by a particular M/WBE group should approximate that group's proportion of the relevant population of vendors. To determine if disparity exists

for M/WBEs or non-M/WBEs within a specific business category, MGT compared the utilization of each group to its respective availability within each of the relevant market areas.

5.1.1 Disparity Index

The disparity index is used to measure the difference between utilization and availability. Several post-Crosby cases, most notably *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, support the use of disparity indices for determining disparity within the marketplace.¹

Although a variety of similar indices could be utilized, the index used must be easily calculable, readily interpreted, and universally comparable. MGT pioneered the use of disparity indices as a method of determining the degree of disparity between utilization and availability.

For this study, the ratio of the percentage of utilization to the percentage of availability multiplied by 100 serves as our measure of choice, as shown in the formula:

$$(1) \text{ Disparity Index} = \frac{\%U_{m_1p_1}}{\%A_{m_1p_1}} \times 100$$

Where: $U_{m_1p_1}$ = utilization of M/WBE₁ for procurement₁
 $A_{m_1p_1}$ = availability of M/WBE₁ for procurement₁

Due to the mathematical properties involved in the calculations, a disparity index value of 0.00 indicates zero utilization. An index of 100 indicates parity between utilization and availability. Firms within a business category are considered underutilized if the disparity indices are less than 100, and overutilized if the indices are above 100.

¹ *Contractors Ass'n of Eastern Pennsylvania, Inc. v City of Philadelphia*, 91 F 3d at 603.

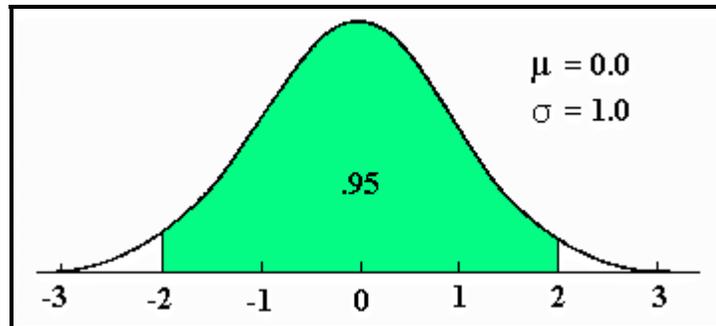
There is no standardized measure to evaluate levels of underutilization or overutilization within a procurement context. But, a tool is needed to determine which occurrences—particularly when there is underutilization—indicate the presence of factors other than those occurring during the normal course of business. Our rule of thumb is that a disparity index of less than 80 indicates that the level of disparity warrants further investigation. The disparity index threshold of 80 is based on the Equal Employment Opportunity Commission’s (EEOC) adopted “80 percent rule” in the *Uniform Guidelines on Employee Selection Procedures*. In the context of employment discrimination, a disparity ratio below 80 indicates a substantial level of disparity demonstrating adverse or disparate impact. The Supreme Court accepted the use of the 80 percent rule in *Connecticut v. Teal (Teal)*, 457 U.S. 440 (1982). In *Teal* and other affirmative action cases, the terms “adverse impact,” “disparate impact,” and “discriminatory impact” are used interchangeably. Thus, MGT’s designation of disparity is founded on a Supreme Court decision.

5.1.2 T-Test

In addition to the disparity index, MGT conducted t-tests to determine if statistically significant differences existed between utilization and availability in terms of contract or payment dollars or number of firms. The t-test determines if the relationship between availability and utilization (suggested by the disparity index value) supports a conclusion of disparity. In other words, the results of the t-test allow us to conclude if the relationships between availability and utilization are strong enough to state, with a high degree of confidence, that the results found in the disparity index represent real disparity.

The t value indicates whether or not the results found in the disparity index are what one would ordinarily expect to find given the attributes of the sampling distribution. Given

the large sample sizes involved, the t distribution approaches a normal distribution. Because of the statistical properties of the normal distribution, 95 percent of all cases can be found within two standard deviations of the mean. Since t values can be positive or negative, it is necessary to determine the critical region of the distribution on each end of the distribution.



Based on the properties of the normal distribution, the critical values are $+1.96$ and -1.96 (the calculated values \pm two standard deviations of the mean). Any t value found between these critical t values is not significant enough for us to conclude that there is disparity. For a conclusion of "statistical significance" to be reached, the t value must be either greater than $+1.96$ or less than -1.96 . When such a t value is present, we can say with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present.

The previous discussion means that any t value less than or equal to -1.96 indicates that firms in a business category are underutilized in terms of contract dollars or contracts awarded. The relationship is said to be statistically significant. In other words, the fact that the t value is so extreme means that we can be sufficiently confident that the underutilization is severe enough to be considered a real phenomenon and not just a statistical artifact of the sampling distribution. In some cases, disparity is indicated by the disparity index but cannot be tested with a t-test due to the mathematical constraint of division by zero. This will occur when there is zero utilization because the utilization

percentage is the denominator in the final calculation for the t-test value. Although these cases cannot be tested to be statistically significant, the existence of disparity can be inferred due to the prima facie evidence of zero utilization levels.

5.2 Disparity Indices and T-Test Results

Tables showing disparity indices and t-test results for Construction, Architecture and Engineering, Professional Services, Other Services, and Goods and Supplies are analyzed in this section. The tables are based on the utilization and availability of M/WBEs and non-M/WBEs in the City of Charlotte relevant market areas as shown in Chapter 4.0.

5.2.1 Construction less than \$30,000

Exhibit 5-1 shows that M/WBEs were generally underutilized during the study period based on the availability of those firms in the relevant market area. Over the five-year study period, Asian American firms, nonminority firms and nonminority women-owned firms were overutilized. In 2000, all M/WBEs were substantially underutilized for Construction prime contracts less than \$30,000 except nonminority women. Asian American-owned firms were overutilized in three of the five years. The disparity index for non-M/WBEs over the five-year study period was 100.29, which indicates overall overutilization for this category of firms.

The t-test results shown in **Exhibit 5-2** for the Construction business category indicate that the findings of underutilization of African American, Native American and Hispanic American-owned firms and the overutilization of nonminority women-owned firms were statistically significant. In each of these cases, the t-tests indicate that other factors beyond normal occurrence must be considered as reasons for the respective underutilization and overutilization.

**EXHIBIT 5-1
DISPARITY ANALYSIS OF CONSTRUCTION PRIME CONTRACTORS
LESS THAN \$30,000 IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of PO's/Payments Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	2.97%	8.55%	34.77	* Underutilization
Hispanic Americans	2.01%	1.74%	115.41	Overutilization
Asian Americans	1.49%	0.82%	181.55	Overutilization
Native Americans	0.04%	0.61%	6.13	* Underutilization
Nonminority Women	10.93%	7.19%	151.93	Overutilization
Nonminority Firms	82.56%	81.09%	101.81	Overutilization
Calendar Year 1999				
African Americans	1.24%	8.55%	14.55	* Underutilization
Hispanic Americans	2.08%	1.74%	118.98	Overutilization
Asian Americans	1.20%	0.82%	146.88	Overutilization
Native Americans	0.21%	0.61%	34.62	* Underutilization
Nonminority Women	11.63%	7.19%	161.73	Overutilization
Nonminority Firms	83.63%	81.09%	103.14	Overutilization
Calendar Year 2000				
African Americans	6.45%	8.55%	75.50	* Underutilization
Hispanic Americans	0.07%	1.74%	3.95	* Underutilization
Asian Americans	0.00%	0.82%	0.00	* Underutilization
Native Americans	0.21%	0.61%	35.43	* Underutilization
Nonminority Women	9.13%	7.19%	126.89	Overutilization
Nonminority Firms	84.14%	81.09%	103.76	Overutilization
Calendar Year 2001				
African Americans	10.57%	8.55%	123.73	Overutilization
Hispanic Americans	0.26%	1.74%	15.07	* Underutilization
Asian Americans	0.49%	0.82%	59.92	* Underutilization
Native Americans	0.11%	0.61%	18.44	* Underutilization
Nonminority Women	9.55%	7.19%	132.78	Overutilization
Nonminority Firms	79.01%	81.09%	97.43	Underutilization
Calendar Year 2002				
African Americans	5.02%	8.55%	58.72	* Underutilization
Hispanic Americans	0.20%	1.74%	11.26	* Underutilization
Asian Americans	2.77%	0.82%	338.16	Overutilization
Native Americans	0.11%	0.61%	18.20	* Underutilization
Nonminority Women	11.84%	7.19%	164.62	Overutilization
Nonminority Firms	80.06%	81.09%	98.73	Underutilization
All Calendar Years				
African Americans	6.24%	8.55%	73.01	* Underutilization
Hispanic Americans	0.64%	1.74%	36.55	* Underutilization
Asian Americans	1.17%	0.82%	142.93	Overutilization
Native Americans	0.14%	0.61%	22.37	* Underutilization
Nonminority Women	10.46%	7.19%	145.38	Overutilization
Nonminority Firms	81.36%	81.09%	100.33	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-2
CONSTRUCTION LESS THAN \$30,000
T-TEST RESULTS FOR PRIME CONTRACTORS**

M/WBE Classification	PO's/Payments Dollars ¹	T Value for Contract Dollars	% of Available Firms ²	T Value for Available Firms
African Americans	6.24%	-3.22 *	8.55%	-4.38 *
Hispanic Americans	0.64%	-4.70 *	1.74%	-6.38 *
Asian Americans	1.17%	1.10	0.82%	1.50
Native Americans	0.14%	-4.32 *	0.61%	-5.87 *
Nonminority Women	10.46%	3.60 *	7.19%	4.90 *
Nonminority Firms	81.36%	0.23	81.09%	0.32

¹ Percentage of related prime contract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.2.2 Construction greater than or equal to \$30,000

Exhibit 5-3 shows the disparity indices for construction projects greater than or equal to \$30,000 in the relevant market area. Over the five-year study period, African American, Asian American, and nonminority women-owned firms were overutilized. Native American and Hispanic American-owned firms were underutilized in every year resulting in substantial underutilization for the study period. The disparity index for non-M/WBEs over the five-year study period was 89.78, which indicates overall underutilization for this category of firms.

The t-test results shown in **Exhibit 5-4** for the Construction business category indicate that the findings of underutilization of Hispanic American and nonminority-owned firms and the overutilization of African American, Asian American, and nonminority women-owned firms were statistically significant. In each of these cases, the t-tests indicate that other factors beyond normal occurrence must be considered as reasons for the respective underutilization and overutilization.

**EXHIBIT 5-3
DISPARITY ANALYSIS OF CONSTRUCTION PRIME CONTRACTORS
GREATER THAN \$30,000 IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of PO's/Payments Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	4.36%	0.95%	458.55	Overutilization
Hispanic Americans	0.00%	0.34%	0.00	* Underutilization
Asian Americans	6.97%	0.62%	1,132.25	Overutilization
Native Americans	1.94%	0.40%	481.40	Overutilization
Nonminority Women	8.61%	2.76%	312.55	Overutilization
Nonminority Firms	78.12%	94.94%	82.29	Underutilization
Calendar Year 1999				
African Americans	2.82%	0.95%	296.42	Overutilization
Hispanic Americans	0.14%	0.34%	40.15	* Underutilization
Asian Americans	3.05%	0.62%	496.05	Overutilization
Native Americans	0.00%	0.40%	0.00	* Underutilization
Nonminority Women	4.87%	2.76%	176.71	Overutilization
Nonminority Firms	89.12%	94.94%	93.88	Underutilization
Calendar Year 2000				
African Americans	3.35%	0.95%	351.74	Overutilization
Hispanic Americans	0.00%	0.34%	0.00	* Underutilization
Asian Americans	3.71%	0.62%	603.08	Overutilization
Native Americans	0.00%	0.40%	0.00	* Underutilization
Nonminority Women	4.57%	2.76%	165.69	Overutilization
Nonminority Firms	88.38%	94.94%	93.09	Underutilization
Calendar Year 2001				
African Americans	2.31%	0.95%	242.59	Overutilization
Hispanic Americans	0.00%	0.34%	0.00	* Underutilization
Asian Americans	3.34%	0.62%	542.57	Overutilization
Native Americans	0.00%	0.40%	0.00	* Underutilization
Nonminority Women	7.37%	2.76%	267.36	Overutilization
Nonminority Firms	86.99%	94.94%	91.62	Underutilization
Calendar Year 2002				
African Americans	4.28%	0.95%	450.01	Overutilization
Hispanic Americans	0.07%	0.34%	21.13	* Underutilization
Asian Americans	6.45%	0.62%	1,049.06	Overutilization
Native Americans	0.03%	0.40%	7.60	* Underutilization
Nonminority Women	8.85%	2.76%	320.96	Overutilization
Nonminority Firms	80.32%	94.94%	84.60	Underutilization
All Calendar Years				
African Americans	3.32%	0.95%	349.36	Overutilization
Hispanic Americans	0.04%	0.34%	11.98	* Underutilization
Asian Americans	4.47%	0.62%	727.03	Overutilization
Native Americans	0.28%	0.40%	69.67	* Underutilization
Nonminority Women	6.65%	2.76%	241.32	Overutilization
Nonminority Firms	85.23%	94.94%	89.78	Underutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-4
CONSTRUCTION GREATER THAN OR EQUAL TO \$30,000
T-TEST RESULTS FOR PRIME CONTRACTORS**

M/WBE Classification	PO/Payments Dollars¹	T Value for Contract Dollars	% of Available Firms²	T Value for Available Firms
African Americans	3.32%	5.01 *	0.95%	8.60 *
Hispanic Americans	0.04%	-5.60 *	0.34%	-9.60 *
Asian Americans	4.47%	7.07 *	0.62%	12.13 *
Native Americans	0.28%	-0.87	0.40%	-1.50
Nonminority Women	6.65%	5.92 *	2.76%	10.16 *
Nonminority Firms	85.23%	-10.36 *	5.06%	-17.78 *

¹ Percentage of related prime contract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

Exhibit 5-5 shows that African American, Native American and nonminority women subcontractors were overutilized during the study period. In calendar year 2002, there was a substantial drop in M/WBE utilization with all M/WBE categories substantially underutilized. The t-test results shown in **Exhibit 5-6** indicate that the underutilization and overutilization of each ethnicity category are statistically significant, which means these results were outside the realm of expectancy from a statistical standpoint.

**EXHIBIT 5-5
DISPARITY ANALYSIS OF CONSTRUCTION SUBCONTRACTORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of Subcontract Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	3.93%	2.91%	135.18	Overutilization
Hispanic Americans	0.68%	0.50%	136.68	Overutilization
Asian Americans	0.11%	0.23%	46.61	* Underutilization
Native Americans	0.00%	0.15%	1.59	* Underutilization
Nonminority Women	4.77%	2.02%	235.89	Overutilization
Nonminority	90.51%	94.20%	96.08	Underutilization
Calendar Year 1999				
African Americans	4.21%	2.91%	144.52	Overutilization
Hispanic Americans	0.74%	0.50%	149.68	Overutilization
Asian Americans	0.00%	0.23%	0.00	* Underutilization
Native Americans	0.08%	0.15%	50.97	* Underutilization
Nonminority Women	3.72%	2.02%	183.75	Overutilization
Nonminority	91.26%	94.20%	96.88	Underutilization
Calendar Year 2000				
African Americans	5.12%	2.91%	175.99	Overutilization
Hispanic Americans	0.65%	0.50%	130.89	Overutilization
Asian Americans	0.02%	0.23%	6.82	* Underutilization
Native Americans	0.00%	0.15%	2.45	* Underutilization
Nonminority Women	6.01%	2.02%	297.12	Overutilization
Nonminority	88.20%	94.20%	93.63	Underutilization
Calendar Year 2001				
African Americans	2.18%	2.91%	74.89	* Underutilization
Hispanic Americans	0.21%	0.50%	41.87	* Underutilization
Asian Americans	0.06%	0.23%	25.97	* Underutilization
Native Americans	0.00%	0.15%	2.45	* Underutilization
Nonminority Women	2.88%	2.02%	142.49	Overutilization
Nonminority	94.67%	94.20%	100.50	Overutilization
Calendar Year 2002				
African Americans	0.57%	2.91%	19.45	* Underutilization
Hispanic Americans	0.06%	0.50%	11.22	* Underutilization
Asian Americans	0.05%	0.23%	23.40	* Underutilization
Native Americans	0.06%	0.15%	37.42	* Underutilization
Nonminority Women	1.52%	2.02%	75.34	* Underutilization
Nonminority	97.75%	94.20%	103.77	Overutilization
All Calendar Years				
African Americans	3.24%	2.91%	111.22	Overutilization
Hispanic Americans	0.46%	0.50%	92.45	Underutilization
Asian Americans	0.04%	0.23%	18.62	* Underutilization
Native Americans	0.19%	0.15%	128.24	Overutilization
Nonminority Women	0.04	2.02%	188.56	Overutilization
Nonminority	92.26%	94.20%	97.94	Underutilization

¹ The percentage of dollars is taken from the subcontractor utilization (based on 27.1%) exhibit previously shown in Chapter 4.0.

² The percentage of available subcontractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-6
CONSTRUCTION
T-TEST RESULTS FOR SUBCONTRACTORS**

M/WBE Classification	Subcontract Dollars ¹	T Value for Subcontract Dollars	% of Available Firms ²	T Value for Available Firms
African Americans	28.61%	16.55 *	2.91%	61.01 *
Hispanic Americans	4.05%	5.25 *	0.50%	19.34 *
Asian Americans	0.37%	0.70	0.23%	2.57 *
Native Americans	1.67%	3.46 *	0.15%	12.77 *
Nonminority Women	33.74%	19.52 *	2.02%	71.97 *
Nonminority	31.56%	-39.22 *	94.20%	-144.60 *

¹ Percentage of related subcontract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.2.3 Decomposed Construction

The disparity analysis for heavy construction, building construction, and specialty trade construction based on vendor availability and census availability are presented in

Appendix K. The results of analysis based on vendor availability is:

- Hispanic Americans and Native Americans are significantly underutilized in Heavy Construction.
- Hispanic Americans, Asian Americans, and Native Americans are significantly underutilized in building construction.
- Hispanic Americans, Native Americans, and nonminority women are significantly underutilized in Specialty Trade Construction.

The results of the analysis based on census data is:

- Hispanic Americans and nonminority women are significantly underutilized in Heavy Construction.
- All M/WBE categories are significantly underutilized in Building Construction.
- Hispanic Americans, Native Americans, and nonminority women are significantly underutilized in Specialty Trade Construction.

5.2.4 Architecture and Engineering

In **Exhibit 5-7**, we show the disparity indices for Architecture and Engineering consultants. Only nonminority and Native American-owned firms were overutilized as Architecture and Engineering consultants for the five-year period. All other ethnicity categories were substantially underutilized. The corresponding t-tests for the Architecture and Engineering contracts, shown in **Exhibit 5-8**, indicate that the

respective findings of under and overutilization for all ethnicities, except Asian American, were statistically significant.

**EXHIBIT 5-7
DISPARITY ANALYSIS OF ARCHITECTURE AND ENGINEERING CONSULTANTS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of Contract Dollars ¹	% of Available Firms ²	Disparity Index ³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	0.00%	3.02%	0.00	* Underutilization
Hispanic Americans	0.00%	1.81%	0.00	* Underutilization
Asian Americans	5.68%	2.29%	247.88	Overutilization
Native Americans	6.38%	0.40%	1,586.34	Overutilization
Nonminority Women	2.53%	8.51%	29.78	* Underutilization
Nonminority Firms	85.41%	83.97%	101.71	Overutilization
Calendar Year 1999				
African Americans	0.59%	3.02%	19.64	* Underutilization
Hispanic Americans	0.23%	1.81%	12.47	* Underutilization
Asian Americans	2.79%	2.29%	121.81	Overutilization
Native Americans	0.43%	0.40%	107.52	Overutilization
Nonminority Women	8.61%	8.51%	101.19	Overutilization
Nonminority Firms	87.35%	83.97%	104.02	Overutilization
Calendar Year 2000				
African Americans	0.00%	3.02%	0.00	* Underutilization
Hispanic Americans	0.56%	1.81%	31.21	* Underutilization
Asian Americans	0.09%	2.29%	3.73	* Underutilization
Native Americans	3.38%	0.40%	841.51	Overutilization
Nonminority Women	4.35%	8.51%	51.07	* Underutilization
Nonminority Firms	91.62%	83.97%	109.11	Overutilization
Calendar Year 2001				
African Americans	0.31%	3.02%	10.37	* Underutilization
Hispanic Americans	0.85%	1.81%	46.88	* Underutilization
Asian Americans	2.83%	2.29%	123.47	Overutilization
Native Americans	0.00%	0.40%	0.00	* Underutilization
Nonminority Women	12.05%	8.51%	141.57	Overutilization
Nonminority Firms	83.96%	83.97%	99.99	Underutilization
Calendar Year 2002				
African Americans	0.00%	3.02%	0.00	* Underutilization
Hispanic Americans	0.00%	1.81%	0.00	* Underutilization
Asian Americans	0.00%	2.29%	0.00	* Underutilization
Native Americans	0.11%	0.40%	27.05	* Underutilization
Nonminority Women	6.58%	8.51%	77.33	* Underutilization
Nonminority Firms	93.31%	83.97%	111.12	Overutilization
All Calendar Years				
African Americans	0.10%	3.02%	3.16	* Underutilization
Hispanic Americans	0.41%	1.81%	22.50	* Underutilization
Asian Americans	1.25%	2.29%	54.75	* Underutilization
Native Americans	2.54%	0.40%	631.64	Overutilization
Nonminority Women	5.74%	8.51%	67.41	* Underutilization
Nonminority Firms	89.97%	83.97%	107.14	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-8
ARCHITECTURE AND ENGINEERING
T-TEST RESULTS FOR PRIME CONSULTANTS**

M/WBE Classification	Contract Dollars¹	T Value for Contract Dollars	% of Available Firms²	T Value for Available Firms
African Americans	0.10%	-18.49 *	3.02%	-21.10 *
Hispanic Americans	0.41%	-4.30 *	1.81%	-4.91 *
Asian Americans	1.25%	-1.82	2.29%	-2.08 *
Native Americans	2.54%	2.66 *	0.40%	3.03 *
Nonminority Women	5.74%	-2.33 *	8.51%	-2.66 *
Nonminority Firms	89.97%	3.90 *	83.97%	4.45 *

¹ Percentage of related prime contract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.2.5 Professional Services

In **Exhibit 5-9**, we show the disparity indices for Professional Services consultants. African American and Hispanic American firms were substantially underutilized as Professional Services consultants for the five-year period, and nonminorities, Asian American and Native Americans were overutilized. The corresponding t-tests for the Professional Services contracts, shown in **Exhibit 5-10**, indicate that the respective findings were statistically significant for all ethnicity categories.

EXHIBIT 5-9
DISPARITY ANALYSIS OF PROFESSIONAL SERVICES CONSULTANTS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002

M/WBE Classification	% of Contract Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	0.96%	7.60%	12.70	* Underutilization
Hispanic Americans	0.16%	1.15%	14.14	* Underutilization
Asian Americans	7.85%	1.97%	399.23	Overutilization
Native Americans	0.16%	0.82%	19.05	* Underutilization
Nonminority Women	7.50%	10.55%	71.08	* Underutilization
Nonminority Firms	83.37%	77.92%	106.99	Overutilization
Calendar Year 1999				
African Americans	1.53%	7.60%	20.15	* Underutilization
Hispanic Americans	0.02%	1.15%	1.77	* Underutilization
Asian Americans	9.75%	1.97%	495.73	Overutilization
Native Americans	0.22%	0.82%	26.27	* Underutilization
Nonminority Women	14.67%	10.55%	139.08	Overutilization
Nonminority Firms	73.82%	77.92%	94.73	Underutilization
Calendar Year 2000				
African Americans	1.42%	7.60%	18.72	* Underutilization
Hispanic Americans	1.04%	1.15%	91.04	Underutilization
Asian Americans	0.17%	1.97%	8.79	* Underutilization
Native Americans	3.29%	0.82%	401.87	Overutilization
Nonminority Women	9.91%	10.55%	93.93	Underutilization
Nonminority Firms	84.16%	77.92%	108.01	Overutilization
Calendar Year 2001				
African Americans	0.71%	7.60%	9.29	* Underutilization
Hispanic Americans	0.00%	1.15%	0.00	* Underutilization
Asian Americans	1.65%	1.97%	84.02	Underutilization
Native Americans	4.18%	0.82%	509.97	Overutilization
Nonminority Women	5.79%	10.55%	54.88	* Underutilization
Nonminority Firms	87.68%	77.92%	112.52	Overutilization
Calendar Year 2002				
African Americans	0.74%	7.60%	9.80	* Underutilization
Hispanic Americans	2.13%	1.15%	185.47	Overutilization
Asian Americans	0.30%	1.97%	15.41	* Underutilization
Native Americans	0.15%	0.82%	18.46	* Underutilization
Nonminority Women	5.53%	10.55%	52.40	* Underutilization
Nonminority Firms	91.15%	77.92%	116.97	Overutilization
All Calendar Years				
African Americans	1.08%	7.60%	14.16	* Underutilization
Hispanic Americans	0.68%	1.15%	59.67	* Underutilization
Asian Americans	3.99%	1.97%	202.84	Overutilization
Native Americans	1.55%	0.82%	189.07	Overutilization
Nonminority Women	8.75%	10.55%	82.92	Underutilization
Nonminority Firms	83.96%	77.92%	107.74	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-10
PROFESSIONAL SERVICES
T-TEST RESULTS FOR PRIME CONSULTANTS**

M/WBE Classification	Contract Dollars¹	T Value for Contract Dollars	% of Available Firms²	T Value for Available Firms
African Americans	1.08%	-25.09 *	7.60%	-22.08 *
Hispanic Americans	0.68%	-2.23 *	1.15%	-1.96 *
Asian Americans	3.99%	4.10 *	1.97%	3.61 *
Native Americans	1.55%	2.35 *	0.82%	2.06 *
Nonminority Women	8.75%	-2.53 *	10.55%	-2.23 *
Nonminority Firms	83.96%	6.53 *	77.92%	5.74 *

¹ Percentage of related prime contract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.2.6 Other Services

M/WBEs were mostly overutilized as Other Services vendors based on the disparity indices shown in **Exhibit 5-11**. Conversely, non-M/WBEs and African American firms were underutilized as indicated by the disparity index. The results of the t-test indicate that vendors, shown in **Exhibit 5-12**, are statistically significant for African American, Hispanic American, Asian American, Native American and women-owned firms.

EXHIBIT 5-11
DISPARITY ANALYSIS OF OTHER SERVICES VENDORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002

M/WBE Classification	% of Contract Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	2.33%	5.60%	41.51	* Underutilization
Hispanic Americans	0.74%	0.39%	189.63	Overutilization
Asian Americans	1.75%	0.46%	376.67	Overutilization
Native Americans	1.67%	0.27%	617.65	Overutilization
Nonminority Women	5.07%	4.71%	107.74	Overutilization
Nonminority Firms	88.45%	88.57%	99.87	Underutilization
Calendar Year 1999				
African Americans	1.75%	5.60%	31.14	* Underutilization
Hispanic Americans	0.87%	0.39%	222.86	Overutilization
Asian Americans	1.33%	0.46%	285.46	Overutilization
Native Americans	0.81%	0.27%	301.76	Overutilization
Nonminority Women	5.45%	4.71%	115.91	Overutilization
Nonminority Firms	89.79%	88.57%	101.38	Overutilization
Calendar Year 2000				
African Americans	2.82%	5.60%	50.34	* Underutilization
Hispanic Americans	0.58%	0.39%	149.87	Overutilization
Asian Americans	2.18%	0.46%	468.77	Overutilization
Native Americans	0.51%	0.27%	188.29	Overutilization
Nonminority Women	4.93%	4.71%	104.81	Overutilization
Nonminority Firms	88.98%	88.57%	100.46	Overutilization
Calendar Year 2001				
African Americans	3.56%	5.60%	63.57	* Underutilization
Hispanic Americans	0.92%	0.39%	236.28	Overutilization
Asian Americans	1.05%	0.46%	226.52	Overutilization
Native Americans	0.38%	0.27%	139.79	Overutilization
Nonminority Women	6.29%	4.71%	133.72	Overutilization
Nonminority Firms	87.80%	88.57%	99.13	Underutilization
Calendar Year 2002				
African Americans	2.13%	5.60%	38.02	* Underutilization
Hispanic Americans	1.14%	0.39%	293.13	Overutilization
Asian Americans	0.86%	0.46%	184.70	Overutilization
Native Americans	2.63%	0.27%	976.18	Overutilization
Nonminority Women	8.52%	4.71%	181.15	Overutilization
Nonminority Firms	84.71%	88.57%	95.65	Underutilization
All Calendar Years				
African Americans	2.59%	5.60%	46.23	* Underutilization
Hispanic Americans	0.85%	0.39%	217.31	Overutilization
Asian Americans	1.42%	0.46%	306.40	Overutilization
Native Americans	1.08%	0.27%	401.72	Overutilization
Nonminority Women	5.99%	4.71%	127.31	Overutilization
Nonminority Firms	88.06%	88.57%	99.43	Underutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

**EXHIBIT 5-12
OTHER SERVICES
T-TEST RESULTS FOR OTHER SERVICES FIRMS**

M/WBE Classification	Contract Dollars¹	T Value for Contract Dollars	% of Available Firms²	T Value for Available Firms
African Americans	2.59%	-18.12 *	5.60%	-15.50 *
Hispanic Americans	0.85%	4.77 *	0.39%	4.07 *
Asian Americans	1.42%	7.73 *	0.46%	6.61 *
Native Americans	1.08%	7.51 *	0.27%	6.42 *
Nonminority Women	5.99%	5.17 *	4.71%	4.42 *
Nonminority Firms	88.06%	-1.48	88.57%	-1.26

¹ Percentage of related prime contract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.2.7 Goods and Supplies

As Goods and Supplies vendors, M/WBEs were substantially underutilized during the study period, except Asian American firms. Firms owned by non-M/WBEs and Asian Americans were overutilized on an overall basis. The disparity indices are presented in **Exhibit 5-13**.

Exhibit 5-14 shows the t-test results for Goods and Supplies vendors. The results suggest that the under/overutilization is statistically significant for all categories. As discussed in Chapter 4.0, analyses of the utilization of subcontractors were not applicable for Other Services and Goods and Supplies.

**EXHIBIT 5-13
DISPARITY ANALYSIS OF GOODS AND SUPPLIES VENDORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of Contract Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
Calendar Year 1998				
African Americans	2.30%	3.29%	70.03	* Underutilization
Hispanic Americans	0.60%	0.47%	127.99	Overutilization
Asian Americans	1.67%	0.74%	225.69	Overutilization
Native Americans	0.01%	0.25%	2.09	* Underutilization
Nonminority Women	2.00%	3.62%	55.16	* Underutilization
Nonminority Firms	93.42%	91.62%	101.96	Overutilization
Calendar Year 1999				
African Americans	3.19%	3.29%	97.01	Underutilization
Hispanic Americans	0.57%	0.47%	120.03	Overutilization
Asian Americans	5.09%	0.74%	686.50	Overutilization
Native Americans	0.01%	0.25%	2.95	* Underutilization
Nonminority Women	4.65%	3.62%	128.30	Overutilization
Nonminority Firms	86.49%	91.62%	94.40	Underutilization
Calendar Year 2000				
African Americans	0.98%	3.29%	29.84	* Underutilization
Hispanic Americans	0.13%	0.47%	27.59	* Underutilization
Asian Americans	1.03%	0.74%	138.83	Overutilization
Native Americans	0.04%	0.25%	16.78	* Underutilization
Nonminority Women	1.62%	3.62%	44.65	* Underutilization
Nonminority Firms	96.20%	91.62%	104.99	Overutilization
Calendar Year 2001				
African Americans	1.48%	3.29%	45.16	* Underutilization
Hispanic Americans	0.26%	0.47%	55.73	* Underutilization
Asian Americans	1.36%	0.74%	184.02	Overutilization
Native Americans	0.04%	0.25%	16.51	* Underutilization
Nonminority Women	1.77%	3.62%	48.81	* Underutilization
Nonminority Firms	95.08%	91.62%	103.77	Overutilization
Calendar Year 2002				
African Americans	3.63%	3.29%	110.52	Overutilization
Hispanic Americans	0.18%	0.47%	38.47	* Underutilization
Asian Americans	1.13%	0.74%	152.70	Overutilization
Native Americans	0.07%	0.25%	29.12	* Underutilization
Nonminority Women	3.79%	3.62%	104.69	Overutilization
Nonminority Firms	91.18%	91.62%	99.52	Underutilization
All Calendar Years				
African Americans	2.22%	3.29%	67.51	* Underutilization
Hispanic Americans	0.32%	0.47%	68.35	* Underutilization
Asian Americans	1.84%	0.74%	248.15	Overutilization
Native Americans	0.04%	0.25%	14.70	* Underutilization
Nonminority Women	2.62%	3.62%	72.21	* Underutilization
Nonminority Firms	92.96%	91.62%	101.46	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

² The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

EXHIBIT 5-14
GOODS AND SUPPLIES
T-TEST RESULTS FOR MATERIALS AND SUPPLIES FIRMS

M/WBE Classification	Contract Dollars¹	T Value for Contract Dollars	% of Available Firms²	T Value for Available Firms
African Americans	2.22%	-8.14 *	3.29%	-5.58 *
Hispanic Americans	0.32%	-2.96 *	0.47%	-2.03 *
Asian Americans	1.84%	9.17 *	0.74%	6.30 *
Native Americans	0.04%	-12.56 *	0.25%	-8.62 *
Nonminority Women	2.62%	-7.08 *	3.62%	-4.86 *
Nonminority Firms	92.96%	5.89 *	91.62%	4.04 *

¹ Percentage of related subcontract dollars awarded to firms within the relevant market area.

² Percentage of available firms in the relevant market area.

* Statistically significant at the 0.05 level.

5.3 Multivariate Regression Analysis

Do minority and woman-owned firms tend to earn significantly less revenue than firms owned by nonminority males? If "yes" are their lower revenues due to their race or gender status or to other factors?

Case law and social science research provide some guidance for addressing these questions. From research literature, in addition to race and gender, we know that other factors, such as firm capacity, owner experience, and education bear a relation to a firm's gross revenues. When multiple factors come into play, sometimes a multivariate statistical analysis can improve our understanding of more complex relationships among factors affecting company earnings. In this study, we employ linear regression to analyze variables, including race and gender, that can affect a firm's success.

5.3.1 An Overview of Multivariate Regression and Description of the Analytical Model

The goal of this analysis was to examine the influence of selected company and business characteristics—especially owner race and gender—on 2002 gross revenues reported by 1,046 companies that participated in an on-line survey administered February through April of 2003. A statistical regression model was used to examine the

relationships between company gross revenues and the presence or absence of “selected company characteristics”: For this study “gross revenue” was the “dependent variable,” or the variable to be “explained” by the presence, absence, or strength of the “selected characteristic” variables, known as “independent” or “explanatory” variables.

Since disparity analysis is an established domain of research, the selection of independent variables for this study was made with reference to an extensive review of literature on disparity analysis. Most economic studies of discrimination are based on a seminal work, “The Economics of Discrimination” by Gary Becker, a Nobel Prize recipient.² Becker was the first to define discrimination in financial and economic terms. Since Becker, labor economists and statistical researchers including Blinder and Oaxaca, Corcoran and Duncan, Gwaltney and Long, Reimers, Saunders, Darity and Myers, Hanushek, Hirsch, Topel and Blau, and others, have employed company earnings, or revenue, as the dependent variable in race and gender discrimination analysis.³ Comparable worth studies have also utilized regression models with gross revenues as the dependent variable for policy analysis⁴ and the U.S. Department of Commerce employs regression analysis (included in 48 CFR 19) to establish price evaluation adjustments for small disadvantaged businesses in Federal procurement programs.⁵ In each approach “gross revenue” is an analog of both firm capacity as well as an estimate of utilization (e.g., mean share of contracting dollars).

² Becker, Gary. 1971, second edition. “The Economics of Discrimination.” The University of Chicago Press, Chicago, p. 167.

³ “Race and Gender Discrimination Across Urban Labor Markets,” 1996. Ed. Susan Schmitz. Garland Publishers, New York, New York, p. 184.

⁴ Gunderson, Morley. 1994. “Male-Female Wage Differentials and Policy Responses.” In “Equal Employment Opportunity: Labor Market Discrimination and Public Policy,” pp. 207 - 227.

⁵ “Federal Acquisition Regulations for Small Disadvantaged Businesses; Notice and Rules.” June 30, 1998. Memorandum for Office of Federal Procurement Policy, Economic and Statistics Administration, Department of Commerce.

The Regression Model Variables

Bates⁶ used at least five general determinants, including firm “capacity,” managerial ability, manager/owner experience, and demographic characteristics such as race and gender to statistically explain variations among the “gross revenues” of firms. These are elaborated below in terms of the dependent/independent variable relationship regression seeks to resolve.

Dependent Variable

For this analysis the dependent variable (the variable to be explained by the independent variables in the model) was defined as “firm 2002 gross revenues.” Ideally, this variable is measured as the exact dollar figure for gross revenues. However, years of experience in conducting information and opinion surveys with companies indicate that firms tend to be resistive to the idea of releasing precise dollar figures, but more responsive when inquiries about earnings are presented as a dollar range. Accordingly, to encourage greater participation in this study’s on-line survey, 10 company, “gross revenue” categories were defined, ranging from Category 1, “less than \$100,000” to Category 10, “more than \$10,000,000.” For the regression analysis, the rank of each revenue category (1 through 10) was used as the revenue data observations for each firm.

Independent (Characteristic) Variables

The independent (i.e., explanatory) variables were those characteristics hypothesized as contributing to the variation in the dependent variable (2002 gross revenues). For this study, independent variables included:

⁶ Bates, Timothy. “The Declining Status of Minorities in the New York City Construction Industry.” Reprinted from *Economic Development Quarterly*, Vol. 12., No. 1, February 1998, pp. 88-100.

- *Number of full-time employees*—The more employees a company has, the greater product volume it is likely to have to generate higher revenues.
- *Owner's years of experience*—The longer a company owner has been in a particular business, the more likely it is that the owner has knowledge of how to acquire contracts and the skills and experience to be successful in business.
- *Percentage of revenues earned in private sector*—Since vendor selection for public projects, large or small, is based usually on a prescribed vendor list maintained by the contracting public sector agency, it has been found that companies with a greater percentage of earnings from the private sector are likely to earn less revenue overall than companies who also do business frequently with the public sector.
- *Owner's level of education*—The research literature consistently reports a positive relationship between education and level of income.
- *Age of Company*—It is argued that a company's longevity is an indicator of both success and owner managerial ability.
- *Race/Ethnic group/gender of firm owners*—The proposition to be tested was whether there is a statistically significant relationship between race/ethnicity/gender of minority firm owners and firm revenue. In the analysis, the category Nonminority Male served as a reference group against which all other race and gender groups were compared.

Finally, since companies tend to be organized around a business concentrations (e.g., Construction, Specialty Trades, Professional services, Other Services and Good and Supplies), “type of business” was introduced as a moderator variable to determine if the model, given adequate sample size, “behaved differently” as a predictor of gross revenue when respondents’ line of business was considered.

Participants’ responses to the on-line survey provided the data to examine the relative importance of these factors. The operational relationship between these constructs (i.e., firm capacity, capability, experience, race, and gender) and measures derived from survey items is presented in **Exhibit 5-15**.

**EXHIBIT 5-15
MODEL CONSTRUCTS, VARIABLES, AND MEASURES
FOR THE ANALYSIS OF WORKING
WITH CITY OF CHARLOTTE, MECKLENBURG COUNTY, AND CHARLOTTE-
MECKLENBURG SCHOOLS**

Model Constructs	Variables	Measures
<i>Capacity</i>	Number of Employees	Number of Full-time and Part-time Employees reported
	Private Contracting	% Total Revenue from Private Sources
<i>Owner's Managerial Ability</i>	Owner's Education	Level of Education (from "some high school" to "postgraduate degree")
	Owner's Experience	Years of Experience
	Company Age	2003 minus Reported "year of establishment"
<i>Demographics</i>	M/WBE Groups	African American-, Hispanic American-, Asian American-, Native American-, Nonminority Woman- and Nonminority Male-owned Firms,
	Sex of Company Owner	Sex of Company Majority Owner or Shareholder

Inclusion of the race/gender variable for individual M/WBE groups—African Americans, Hispanic Americans, Asian Americans, Native Americans, and Nonminority Women—permitted examination of the influence of “minority status” on the dependent variable, revenue, both by individual group and as a general category (i.e., M/WBE), controlling for the effects of the other independent variables.

Exploring Variable Relationships: How Regression Analysis Works

Multiple regression analysis permits simultaneous examination not only of the effects on the dependent variable of **all** independent variables in the multivariate model, but also the effect of each, unique variable (i.e., “controlling” for the effects of the other independent variables in the equation). The effect of each predictor (independent) variable on the dependent variable is expressed as the magnitude of the change in the dependent variable (y) for each unit change in the independent variable (x) plus an “error term.” Since the independent variable is never a perfect predictor of the dependent variable—that is, X is expressed as an imperfect predictor of Y such that one unit

change in X *never* leads to one unit change in Y—the “error term,” ϵ , is postulated to acknowledge the residual change in the value of Y that X cannot explain.

The goal in sound regression modeling, therefore, is to minimize residual values associated with the independent variables and to maximize their explanatory “power.” In other words, a good model that seeks to explain what causes revenue earnings, in this case, will hypothesize a combination of independent variables, based on solid research findings established in research, having sufficient explanatory power to account for case-by-case differences in company revenue, while minimizing that portion of variation in revenue values that the independent variable cannot explain (i.e., minimizing the difference between Y values predicted by the X’s in the model and *actual* Y values).

Assessing the General Model and the Effect of Individual Independent Variables

There are several statistical litmus tests in regression analysis to assess a model’s explanatory power. For example, one can refer to the model’s goodness of fit, also known as the coefficient of determination. Put simply, the coefficient of determination for a model assesses the degree to which the model maximizes the explanatory power of the independent variables and minimizes prediction error relative to the dependent variable; that is, the degree to which the model maximizes the “closeness” of actual dependent variable values and the dependent variable values predicted by the regression model. The coefficient of determination (measured in regression as R^2) permits us to make a judgment about the combined effect on the dependent variable of all the independent variables in a model.

Assessing Variables in the Model

As suggested earlier, in a model with multiple independent, or predictor, variables, the effect of each individual independent variable is expressed as the expected change in the dependent variable (y) for each unit change in the independent variable (x), holding constant (or controlling for) the values of all the other independent variables (i.e., the effect on Y of the other X’s in the equation). When X and Y values are plotted on a

graph, linear regression attempts to find a straight line of best fit (also known as the least-squares line) that minimizes the differences between actual Y and predicted Y values as a function of X. The slope of this line represents the statistical relationship between the predicted values of Y based on X. The point at which this regression line crosses the Y axis (otherwise known as the constant) represents the predicted value of Y when X = 0. If the effect of X on Y is determined to be statistically significant (e.g., a significance level of $p < 0.05$ asserts that the calculated relationship between X and Y could occur due to chance only 5 times in 100), it can be asserted that X may indeed play a role in determining the value of Y (in the case of this study, company revenues). For example, if the slope coefficient of the variable representing one of the specific racial groups is determined to be statistically significant, then, all other things being equal, the hypothesis that race of the owner of a firm affects the annual revenue of the firm has only a 5 percent chance of being false. In disparity research, theory asserts that the negative effect of race on revenue earnings associated with being a minority-owned business is likely a product of discrimination.

5.3.2 Multivariate Regression Model

Mathematically, the multivariate linear regression model is expressed as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \varepsilon$$

Where: Y = annual firm gross revenues.

α = the constant, representing the value of Y when $X_i = 0$

β = coefficient representing the magnitude of X_i 's effect on Y

X = the independent variables, such as capacity.

experience, managerial ability, race and gender.

ε = the error term, representing the variance in Y unexplained by X_i

This equation describes the hypothesized relationship between the dependent variable and the independent variables and was used to test the hypothesis that there is no difference in 2002 revenue earnings for M/WBE firms when compared with nonminority

male-owned firms. Traditionally, the hypothesis of no difference (known as the null hypothesis) is represented as:

$$H_0 : Y_1 = Y_2$$

We can reject the null hypothesis if the analysis indicates that race and gender have been found to affect firm revenue (i. e, $H_1 : Y_1 \neq Y_2$, the alternate hypothesis). Results are statistically significant if it is determined that the probability of achieving this difference due to chance was less than 5 in 100 (i.e., $p < .05$).

5.3.3 Multivariate Regression Model Results

The regression model tested the effects of selected demographic and business characteristic variables on revenue earnings for firms that participated in the study.

Results are reported in **Exhibit 5-16** followed by a brief discussion of findings.

**EXHIBIT 5-16
CITY OF CHARLOTTE, MECKLENBURG COUNTY, CHARLOTTE-MECKLENBURG
SCHOOLS
RESULTS OF REGRESSION ANALYSIS**

Variable	Unstandardized		Standardized		
	B	Std. Error	Beta	t	Sig.
Constant**	2.291	.242		9.453	<0.001
Nonminority Women	-.0433	.139	-.132	-3.112	0.002
African American	-1.173	.158	-.309	-7.406	<0.001
Native American*	-.0217	.491	-.022	-0.441	0.659
Hispanic-American*	9.963-2	.378	.013	0.263	0.792
Asian-American*	-0.323	.314	.053	-1.030	0.304
M/WBE**	-.0627	.113	-.199	-5.532	<0.001
Sex of Owner	-0.430	.125	-.131	-3.434	<0.001
Number of Employees**	3.817 ⁻³	.001	.287	8.047	<0.001
Age of Company**	2.085 ⁻²	.003	.245	6.265	<0.001
Private Sector Revenue %**	-2.932 ⁻³	.002	-.066	-1.905	0.057
Owner's Experience**	1.273 ⁻²	.005	.092	2.428	0.016
Owner's Level of Education**	0.222	.075	.101	2.940	0.003

* In general, multivariate analyses stratified by race/ethnicity for Hispanic American-, Asian American- and Native American-owned firm respondents contained too few observations to permit conclusive judgments regarding any of the independent variable effects on company revenues. Survey subsample sizes by race/ethnic/sex were as follows: Nonminority Male, n = 568; Nonminority Women, n = 280; African American, n = 170; Hispanic American, n = 33; Asian American, n = 36; Native American, n = 15.

** Constant and partial coefficient values were derived from the General Model, predicting revenue for two gross race/ethnicity/gender categories, M/WBEs and Nonminority Males, in conjunction with the other independent variables in the model-- Number of Company Employees, Owner's Years of Experience, Owner's Level of Education, Company Age, and Percent of the Company's Revenue from the Private Sector. Other coefficient values were derived substituting individual race/ethnic/gender categories for the inclusive M/WBE category in the general model.

General Results

- The regression analysis which included the independent variables of firm M/WBE status, age of company, owner education level, number of employees, percent of revenue from private sector and owner experience for industry groupings had an R square of .32, indicating that the independent variables explained 32 percent of the variations in firm revenue categories.
- A similar analysis that replaced the firm M/WBE status with the individual race/gender characteristic of the firm produced an R square of .38.
- Both of the above regression analyses strongly support the hypothesis that differences in the revenue of firms is due to the race/gender status of the firm:
 - First, when the all race/gender independent variables were removed from the analysis, the explanatory power of the model dropped to 21 percent indicating that the race/gender status of the firms had a significant impact on the revenues of firms.
 - The understanderized beta coefficient for the M/WBE variable was -.627, indicating that the revenue category of M/WBE firms were almost one category lower for similar nonminority male firms. The standardized beta coefficient was a -.199.
 - The understanderized beta coefficient for African American firms was -.1.173, indicating that these firms had annual revenues that were more than one category lower than similar firms owned by nonminority males.
 - The understanderized beta coefficient for the nonminority women variable was -.433, indicating that these firms had annual incomes that were in a category about one-half lower than nonminority male owned firms.
 - The understanderized beta coefficients for firms owned by Native Americans and Hispanic Americans were not statistically significant primarily because of the small numbers of those firms in our sample. Therefore analyses did not support any conclusion about whether the revenue of those firms were adversely affected by their minority status.
- Because the regression analyses showed that, after statistical adjustments were made for variables such as age of company, education level of owner, number of employees, percent of revenue from private sector and owner experience, those firms owned by women and minorities still had **lower** annual revenues, the analyses strongly support the hypothesis that the lower revenues is due to the M/WBE status of the firms. These analyses, while not proving that

discrimination caused the lower annual revenues, certainly supports the idea that discrimination was a significant factor.

Results by Race and by Business Type

Since for some analyses, a race-by-business category stratification reduced subsample sizes considerably in some cases, a note of caution must accompany some of the findings. This caveat notwithstanding, there was a notable, consistent trend of a negative race/gender effect within business categories, especially for African American owned firms.

- When results for nonminority males versus M/WBEs were analyzed within business type, model fit values increased from 32 percent in the general model (for all business categories, combined) to 46 percent in the Construction category (all predictor variables but company age achieved statistical significance); to 41 percent in the Goods and Supplies, and decreased slightly to 30 percent in the Professional Services category; and to 27 percent in the Business Services category. For M/WBE models stratified by each, Goods and Supplies, and Professional Services, partial regression coefficients for the independent variables number of employees and age of company were consistently associated with revenue earnings both significantly and positively.
- For nonminority women, when compared with nonminority males within business type, model fit increases were as follows: Construction, 34 percent; Goods and Supplies, 43 percent; Professional Services, 36 percent; and Business Services, 14 percent. However, in each case, changes in the model's fit did not seem to be an artifact of nonminority woman minority status per se, as this variable was statistically nonsignificant in each by-business-line model.
- For African Americans, when compared with nonminority males within business type, model fit values within individual business type categories were nearly identical to the model fit value associated with the general model—that is, roughly 31 per cent. However, the statistically significant, partial regression coefficient for African Americans was related negatively to revenue earnings in *each* business category of sufficient sample size.

General Findings

- The regression analyses by individual industry groupings produced the same statistical conclusions as the broader set of analyses described above that M/WBE firms generated significantly lower 2002 revenues than nonminority male owned firms, even after adjustments were made for the impact of other potential explanatory factors.
- The analyses showed that the 2002 revenues were significantly lower for firms owned by African American and nonminority women for all industry categories, after adjustments were made for the other variables.

The null hypothesis that there is no difference between the M/WBE and nonminority firm groups' gross revenues as a function of race, when controlling for demographic and firm characteristics, was rejected. The negative relationship between race and revenue was particularly pronounced for African American- and nonminority women-owned firms.

5.4 Conclusions

This chapter used disparity indices to compare the availability and utilization findings from Chapter 4.0. The disparity indices for each of the business categories indicate whether there is the presence of disparity for each ethnic or gender group, and the ensuing t-test depicts the statistical significance of these disparity results.

The underutilization was statistically significant for the following categories:

- African American, Hispanic American, and Native American-owned prime contractors for Construction projects less than \$30,000;
- Hispanic American and Native American prime contractors for Construction projects greater than \$30,000;
- Asian American subcontractors for construction projects greater than \$30,000;
- African American, Hispanic American, Asian American, and nonminority women Architecture and Engineering prime consultants;

- African American and Hispanic American Professional Services prime consultants;
- African American-owned Other Services firms; and
- African American, Hispanic American, Native American, and nonminority women-owned Goods and Supplies vendors.

The multivariate regression analyses strongly support the above findings of disparity for the different M/WBE groups and provide strong evidence that the disparity is due, in part, to a firm's race and/or gender status.

The regression analyses explained from 32 to almost 50 percent of the variation in the dependent variable observations, depending on the variables included in each analysis, indicating that the models were providing statistically reliable findings. After adjusting for impact of non-M/WBE factors, such as number of employees, age of company, owner's experience and owner's education level, the analyses showed that M/WBE firms had significantly lower 2002 revenues than similar nonminority male firms. The consistency of the lower 2002 revenues of M/WBE firms for both the all-industries analyses and for African American and nonminority women firms among the different industry grouping analyses further strengthens the evidence that the disparities are due, at least in part, to the race and/or gender status of the firms.

Unfortunately, the number of Native American, Hispanic American, and Asian American firms in the sample were not sufficiently large to produce statistically reliable findings. However, when their firms were included in the analyses involving all M/WBE firms had lower 2002 revenues even after adjusting for other non-M/WBE factors.

6.0 ANECDOTAL ANALYSIS

6.0 ANECDOTAL ANALYSIS

This chapter describes the results of the analysis of anecdotal information for the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools Disparity Study. The collection and analysis of anecdotal data are performed to determine whether underutilization of minority and women-owned firms is the result of objective, nonbiased bidding and purchasing procedures or the result of discriminatory practices. Anecdotal evidence is designed to explain and interpret statistical findings. Courts have ruled that the combination of disparity findings and anecdotal evidence provides the best evidence demonstrating the existence of historical discriminatory practices, if any. Unlike other chapters in this report, anecdotal analysis does not rely solely on quantitative data. Anecdotal analysis also utilizes qualitative data to describe the context of the examined environment as well as the climate in which all businesses and other relevant entities applicable to our study operate.

The following sections present the approach MGT used in the collection of anecdotal data, the methods employed in the collection of those data, and the quantitative and qualitative results of the data collected. This chapter is organized into the following sections:

6.1 Methodology

6.2 On-Line Vendor Survey Demographics

6.3 Personal Interviews and Focus Groups Demographics

6.4 Findings

6.1 Methodology

MGT used a variety of methods to collect anecdotal data from individuals representing firms in the Charlotte market area owned by minorities, nonminority

women, and nonminority men. Specifically, four activities were conducted to obtain anecdotal information for the study:

- On-line Vendor Survey
- Personal Interviews
- Focus Groups
- Public Open Forum

Each of the four information gathering methods has its own advantages and disadvantages, but by combining several methodologies, MGT is able to describe a more complete picture of the “real world” of the participants studied. For instance, the on-line vendor survey features the use of a structured interview guide that provides the advantage of:

- gathering a wide range of data from a broad base of the business community;
- providing information from those who may be reluctant to have their observations attributed directly to them; and
- allowing the respondent to make comments that will not be challenged by peers or panelists as in the case of focus groups and public hearings.

However, an on-line vendor survey does not allow for the in-depth exploration of issues as they are raised. The personal interviews, which consist of one-on-one interviews using a structured interview instrument, offer the advantage of:

- hearing from people who are reluctant to speak in front of groups or whose schedule does not allow them to attend meetings; and
- providing opportunities to fully explore the concerns, experiences, and issues of the interviewees.

Personal interviews, however, have a disadvantage in that individuals are generally free from having their comments challenged by peers or panelists as in the case of focus groups or public hearings. Focus group sessions offer the advantage of group consensus building in response to questions regarding major issues, practices, and experiences. Individuals tend to exercise care in making statements when they know

their peers may challenge them. At the same time, patterns of experience and opinions can be quickly established or refuted through group discussion. Focus groups, however, do not permit in-depth exploration of the individual experiences. Focus groups are ineffective in obtaining information from those who are reluctant to speak in group meetings.

The public open forum, which consists of unsworn testimony by individuals to a panel of professionals, offers the advantage of hearing from individuals who feel strongly enough about an issue, practice, or event that they are willing to testify to a panel and in front of an audience. Panel members conduct detailed explorations of the issues, practices, or events through questioning. Public open forums, however, are not effective in obtaining information from those who are reluctant to speak in front of an audience or contractors on whom they rely for work.

To develop a pool of vendors from which to select business owners for participation in one of the above activities, MGT mailed a letter announcing the study to over 40,000 vendors, along with a referral form and short demographic survey. The vendor list for the mail out was a combination of vendor lists provided by the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools. A copy of this letter and a referral form are located in **Appendix R**. The short demographic survey was completed by 987 firms. The referral form was completed by 428 vendors.

6.1.1 On-Line Vendor Survey

MGT conducted a survey during February through April of 2003, soliciting the participation of firms that had done or attempted to do business with the City of Charlotte, Mecklenburg County, and/or Charlotte-Mecklenburg County Schools. Two major goals of the survey included determining the nature of firms' business experiences

with the three agencies and exploring their perceptions of discriminatory practices they might have encountered since 1998 when attempting to conduct business.

Survey participation was solicited in two mailings from MGT based on vendor information provided by the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools. In a letter of introduction, prospective participants were asked to participate in the survey and were provided instructions describing the procedure for accessing an on-line version of the survey from an MGT Web site. Participants who did not have access to the Web, or who preferred not to use the Web, were provided directions for obtaining a hard copy version of the survey. In addition, the survey was advertised on the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools Web sites, with a link to the survey. Project directors at each of the agencies were also given hard copies of the survey for distribution as appropriate. The first mailing of instructions to 40,980 addresses took place during late February 2003. A second postcard “reminder” mailing to 23,752 addresses took place in early April 2003. The differences in these mailings were due to invalid addresses and inappropriate vendors (i.e. foster care parents and students). In all, there were 1,046 usable surveys from participants, all but 13 of whom (i.e., those who requested hard copy versions) provided responses on-line. A breakdown by work type of completed surveys is shown in **Exhibit 6-1**.

**EXHIBIT 6-1
COMPLETED SURVEYS BY WORK TYPE**

Work Type	# of Completed Surveys
General Contractor	60
Heavy Construction	8
Specialty Trade Contractor	125
Architectural & Engineering Services	55
Professional Services	211
Business Services	205
Commodities & Equipment	361
Other	21
Total	1,046

Source: MGT On-line Survey of Businesses, February–April 2003.

The on-line survey and detailed response frequencies to the survey are presented in **Appendix S**.

6.1.2 Personal Interviews

MGT conducted personal interviews with the vendors. An interview guide was used and covered a range of questions concerning a firm's experiences conducting business with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools, experiences in the private sector, and the firm's business operations. See **Appendix T** for a copy of the interview guide and affidavit.

In collecting anecdotal evidence relevant to the existence of discriminatory practices, the interviewers were objective in identifying the participants, drafting interview questions, asking questions during the interviews, and in eliciting follow-up responses from individuals. The interviewers made no attempt to prompt or guide the testimony or responses of individuals.

For personal interviews, the majority of the firms were selected from the approximately 2,300 firms listed in the City of Charlotte's M/WBE database, as well as those vendors who indicated on their referral form that they would like to be considered for a personal interview. Firms on the M/WBE list had been certified as minority or women-owned businesses interested in doing business with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools. The City maintained the list for all three entities. Some minority-owned firms were selected from the Carolinas Minority Supplier Development Council, a bi-state organization comprising larger firms that focus on doing business primarily with large private sector corporations. The intent of using this list was to ascertain if these larger MBEs attempted to also do business in the public sector, and if not, why. The Latino Chamber of Commerce was asked to

identify firms to be interviewed. The reason was the same as for soliciting firms from the Carolinas Minority Supplier Development Council; i.e., to ascertain if Hispanic-owned firms attempted to also do business in the public sector, and if not, why. The nonminority-owned firms were taken from a list of construction firms that do business with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools.

MGT scheduled 75 personal interviews and completed 74. The results of these interviews are included in the interview findings. The companies interviewed represent a cross section of firms in both construction and other procurement areas. MGT staff members interviewed 25 African American-owned firms, 9 Hispanic-owned firms, 16 women-owned firms, and 19 nonminority-owned firms. In addition, the heads of the Metrolina Minority Contractors Association (MMCA), the Carolinas Minority Supplier Development Council (CMSDC), the Latino Chamber of Commerce, the National Association of Women Business Owners (NAWBO), and the National Association of Women In Construction (NAWIC) were interviewed.

The majority of the interviews were held in the owners' offices. If that was not convenient, some were held in the offices of the Metrolina Minority Contractors Association, the Latino Chamber, and the conference room of a local hotel. The interviews, which were recorded on tape and later transcribed, ranged in length from 30 minutes to an hour and 15 minutes. Before each interview, business owners were informed that their responses to the questionnaire would be confidential and would not be distributed to any other person or firm with their identity revealed except if legal action were filed, in which case, all documentation would be provided to the court.

6.1.3 Focus Groups

MGT conducted three focus groups: one each with African American-owned, Hispanic-owned, and women-owned firms. These began with dinner at 5 PM, and the

actual focus group was conducted from approximately 5:30 to 7:30 PM. A court stenographer recorded the dialog and provided transcripts of each. Nine African American business owners, eight Hispanic, and four women business owners participated in their respective focus groups.

Each participant completed a profile of his or her firm similar to that solicited from the one-on-one interview protocol. The African American focus group was held at the Minority Contractors Resource Center; the focus groups for Hispanic-owned firms and women-owned firms were held in hotels. The majority of the participants were in construction-related businesses. The trade groups referenced above—MMCA, CMSDC, the Latino Chamber of Commerce, NAWBO, and NAWIC—assisted in identifying and contacting participants for the focus groups.

6.1.4 Public Hearing

A public hearing in the form of an Open Forum was held to receive testimony and exhibits relevant to minority and female participation in construction and procurement contracting in the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools and their M/WBE programs. The Open Forum was held from 4 to 8:30 PM at a centrally located public library that the owners agreed was geographically well situated.

The forum was promoted in the following ways:

- legal notices placed in the *Charlotte Observer* and the *Charlotte Post*;
- notification sent to the M/WBE and/or Small Business staff in the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools;
- notices placed on the owners' respective cable television stations and/or Web sites;
- notices e-mailed to those Small Business Enterprises in the City's database; and

- notices sent to the MMCA, NAWIC, NAWBO, and Latino Chamber of Commerce.

No one attended the Open Forum to present testimony.

6.2 On-Line Vendor Survey Demographics

This section reports results of the on-line vendor survey. First a demographic and business profile of respondents is provided. Other topics discussed include vendors' experiences with regard to obtaining loans, bonds, and insurance; their work experience with the private sector and with area agencies; any discriminatory experience; and attitudes regarding business practices and experiences.

6.2.1 Respondent Profile

Exhibit 6-2 reports a business and demographic profile of survey participants. In terms of respondents' business line, the largest category represented business associated with commodities and equipment (35%). A fifth of the sample (20%) was represented by professional services as was business services (20%), and nearly one-fifth of the sample (19%) was engaged in general contracting, heavy construction, and specialty trades, combined.

A plurality of respondents (42%) indicated they had established their business within the past 10 years; 27 percent were established between 1984 and 1993; and nearly a third (32%) have been established more than 20 years.

EXHIBIT 6-2
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
SELECTED DEMOGRAPHICS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Length of establishment</i>								<i>n=1,090</i>
1973 or earlier	3%	0%	3%	13%	11%	7%	25%	17%
1974 to 1983	7%	3%	8%	20%	14%	11%	18%	15%
1984 to 1993	19%	33%	25%	33%	31%	27%	28%	27%
1994 to 2003	72%	64%	64%	33%	44%	55%	29%	42%
<i>Organizational structure of company</i>								<i>n=1,092</i>
Sole Proprietorship	40%	15%	6%	7%	19%	24%	11%	18%
Partnership	5%	0%	3%	0%	2%	3%	3%	3%
Corporation	42%	76%	83%	87%	70%	63%	76%	70%
Limited Liability Partnership	3%	3%	0%	0%	1%	2%	1%	1%
Limited Liability Corporation	7%	3%	6%	7%	4%	5%	6%	5%
Other	2%	3%	3%	0%	4%	3%	3%	3%
<i>Company's primary line of business</i>								<i>n=1,046</i>
General Contractor	4%	18%	3%	7%	6%	6%	6%	6%
Heavy Construction	1%	3%	0%	0%	0%	1%	1%	1%
Specialty Trade Contractor	14%	6%	6%	20%	11%	12%	12%	12%
Architectural & Engineering Services	2%	6%	13%	0%	3%	4%	7%	5%
Professional Services	25%	18%	13%	13%	25%	24%	17%	20%
Business Services	31%	15%	31%	20%	21%	24%	15%	20%
Commodities & Equipment	20%	33%	34%	40%	30%	27%	41%	35%
Other	3%	0%	0%	0%	3%	2%	2%	2%

Source: MGT On-line Survey of Businesses, February–April 2003

EXHIBIT 6-2 (Continued)
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
SELECTED DEMOGRAPHICS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Number of full-time employees</i>								<i>n=777</i>
1 - 3 employees	42%	11%	32%	9%	32%	34%	19%	26%
4 - 10 employees	33%	28%	24%	55%	34%	34%	27%	30%
11 - 30 employees	14%	28%	16%	18%	21%	19%	25%	22%
31 or more employees	11%	33%	28%	18%	12%	14%	29%	22%
<i>Gross Revenues</i>								<i>n=1,043</i>
Less than \$100,000	54%	22%	17%	13%	22%	32%	9%	20%
\$100,001 to \$500,000	24%	13%	17%	27%	24%	23%	20%	21%
\$500,001 to \$1,500,000	11%	13%	29%	27%	22%	19%	24%	22%
\$1,500,001 to \$4,500,000	5%	25%	14%	13%	21%	16%	19%	17%
\$4,500,001 to \$10 million	1%	16%	11%	0%	4%	4%	14%	9%
More than \$10 million	4%	13%	11%	20%	6%	7%	14%	10%
<i>Mean percentage of gross revenues earned from private and public sector business in 2002</i>								<i>n=965</i>
Private Sector	58%	61%	65%	44%	56%	58%	57%	58%
Public Sector	42%	39%	35%	56%	44%	42%	43%	42%
<i>Company certified as MBE, WBE, or DBE?</i>								<i>n=880</i>
Yes	71%	80%	74%	57%	51%	61%	0%	
No	29%	20%	26%	43%	49%	39%	100%	

Source: MGT On-line Survey of Businesses, February–April 2003

The majority of respondents' businesses, 70 percent, were incorporated, and nearly one-fifth (18%) were sole proprietors. The majority of firms were small businesses, with 56 percent reporting employing 10 or fewer employees, and 22 percent reporting 11 to 30 employees. Larger companies (more than 30 employees) made up 22 percent of the sample. Forty-one percent of the companies sampled reported 2002 revenue of less than \$500,000. More than one-third (36%) reported 2002 revenue of more than \$1.5 million, and 10 percent earned more than \$10 million in 2002 revenue. Overall, in 2002 businesses earned most of their income from the private sector (58%).

When survey results were examined by race/ethnicity and gender of business owner,¹ findings were as follows:

- Firms owned by nonminority males and by M/WBEs as a whole were equally likely to be engaged in construction, heavy construction, and specialty trades (19% for both groups). However, nonminority male-owned firms were much more likely to be engaged in commodities and equipment enterprises than were M/WBE firms (41% vs. 27%), whereas M/WBEs were more likely to be providers of professional and business services than were nonminority male-owned firms (24% vs. 17% and 15%, respectively.)
- More than half of all minority firms in the sample (55%) were established within the past 10 years, including nearly three-quarters of all African American firms (72%). By contrast, fewer than one-third of nonminority male firms were established in the past 10 years (29%) while a quarter of nonminority male-owned firms had been in business more than 30 years.
- Respondent firms owned by nonminority males tended to have more employees than minority and woman-owned firms, with nearly a third of nonminority firms reporting more than 30 employees, or double the rate in this category for minority-owned firms. Only 12 percent of nonminority woman-owned and 11 percent of African American owned-firms reported more than 30 employees.
- More than one-quarter of firms owned by nonminority males earned more than \$4.5 million in 2002, compared with only 11 percent minority firms. On the other hand, only one-tenth of nonminority male firms earned less than \$100,000 in 2002, compared with nearly

¹ Due to their small sample size, analyses will not include discussion of the Native American category. Percentages are included in the table for reference, but any inferences made for such a small sample size would not be reliable.

one-third of M/WBE firms (32%). African Americans were most frequently represented in this lowest category of revenue earnings, with more than half of all African American firms reporting revenue of \$100,000 or less in 2002.

- Regardless of race/ethnicity/gender group, nearly three-quarters of companies tended to organize as corporations, with the exception of African American companies, which were nearly as likely to operate as sole proprietors (40%) as they were to incorporate (42%).
- The percentage of 2002 revenue earned in the private sector did not vary greatly as a function of race/gender category. In general, firms reported earning between half to two-thirds of their 2002 revenue from private sector business.
- Overall, minority and women-owned firms responding to this survey tended to be smaller, to have earned less revenue, and to have been in business for a shorter period of time than nonminority male-owned firms.

Other survey questions gathered information on business owner gender and race/ethnicity, the results of which are reported in **Exhibit 6-3** and summarized below.

- Two-thirds of all firms sampled for this study were owned by males (67%), in contrast with minority firms, 62 percent of which were owned by women.
- Nearly half of businesses surveyed (49%) indicated they were owned by racial or ethnic minorities and/or women. Of the total businesses surveyed, 15 percent were African American owned, 3 percent were Asian American-owned, 3 percent were Hispanic American-owned, 1.5 percent were Native American owned, 25 percent were nonminority woman-owned, and 51 percent were nonminority male owned.
- Although the owner's highest level of education varied across subgroups, overall, between roughly two-thirds and three-quarters reported having earned a college degree or postgraduate degree.
- Nonminority male firm owners reported having more years of experience in their fields than did minority and women business owners, with 40 percent of firms owned by nonminority males reporting 30 or more years experience, as compared with M/WBE firms, only 17 percent of which reported 30 or more years of experience.

EXHIBIT 6-3
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
SELECTED DEMOGRAPHICS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Gender of Company owner</i>								<i>n=1,107</i>
Male	62%	55%	80%	47%	0%	32%	100%	67%
Female	38%	45%	20%	53%	100%	68%	0%	33%
<i>Owner's highest level of education</i>								<i>n=1,073</i>
Some High School	1%	0%	0%	0%	0%	1%	1%	1%
High School Graduate	6%	6%	0%	7%	9%	7%	6%	7%
Trade or Technical Education	5%	0%	3%	0%	5%	4%	5%	4%
Some College	21%	24%	3%	29%	18%	18%	13%	16%
College Graduate	40%	48%	31%	43%	40%	40%	47%	44%
Postgraduate Degree	27%	21%	63%	21%	28%	30%	28%	29%
<i>Owner's years of experience</i>								<i>n=1,061</i>
Less than 10 years	22%	19%	29%	23%	21%	22%	8%	15%
11 to 15 years	25%	22%	23%	23%	24%	24%	14%	19%
16 to 20 years	21%	34%	9%	23%	17%	19%	16%	18%
21 to 29 years	13%	13%	17%	15%	22%	18%	21%	20%
30 to 35 years	14%	6%	17%	15%	9%	11%	22%	17%
More than 35 years	5%	6%	6%	0%	6%	6%	18%	12%

Source: MGT On-line Survey of Businesses, February–April 2003

6.3 Personal Interviews and Focus Groups Demographics

Business Characteristics

The interview instrument and focus group registration form included questions designed to establish a business profile for each business participating in the process. The information gathered included the primary line of business, number of years each firm has been in business, organizational structure, gross revenues, and firm size. Please note that not all participants answered every question.

Primary Line of Business

Exhibit 6-4 summarizes demographic data on M/WBEs' primary line of business. The categories are construction; architectural and engineering; professional services, which include services that require an advanced degree or special training; other services which include security, equipment repair, and janitorial; and goods and supplies. In addition to the information above, the chart also reflects the number and percentage of businesses in each category by ethnicity.

**EXHIBIT 6-4
CITY OF CHARLOTTE, MECKLENBURG COUNTY, AND CHARLOTTE-
MECKLENBURG SCHOOLS
PERSONAL INTERVIEWS AND FOCUS GROUPS
BUSINESS TYPE BY ETHNICITY**

Business Category	African American	Hispanic	Women-Owned	Nonminority Male	Total	Percent of Total
Construction	17	11	6	12	46	52.27%
Architectural and Engineering	2	0	1	1	4	4.55%
Professional Services	0	0	3		3	3.41%
Other Services	11	4	8	6	29	32.95%
Goods and Supplies	4	1	1		6	6.82%
Total	34	16	19	19	88	100.00%
Percent of Total	38.64%	18.18%	21.59%	21.59%	100.00%	

Source: M/WBE personal interviews and focus group participants.

As shown in **Exhibit 6-4**, of the firms participating, 52 percent were in the construction category; 4 percent were in architectural and engineering, 3 percent were in

professional services; 33 percent were in the other services category; 7 percent were in the goods and supplies category.

Years in Business

Eighty percent of the African American-owned firms participating were established between 1980 and 2003 as shown in **Exhibit 6-5**. Only three firms (9%) were established before 1980. Of the participating Hispanic-owned firms, all have been established since 1990. Nine (47%) of the participating WBE firms were established between 1996 and 2003. Eight (43%) WBE firms were established between 1980 and 1995, with two being established prior to 1980. The majority of nonminority male firms were established prior to 1989, with only two firms being established since 1996. Minority and women-owned firms have established their business in more recent years compared with nonminority male-owned firms.

**EXHIBIT 6-5
CITY OF CHARLOTTE, MECKLENBURG COUNTY, AND CHARLOTTE-
MECKLENBURG SCHOOLS
PERSONAL INTERVIEWS AND FOCUS GROUPS
YEAR BUSINESS ESTABLISHED**

Years	African American		Hispanic American		Nonminority Women		Nonminority Male	
	Total	%	Total	%	Total	%	Total	%
Prior to 1940					1	5.56%	2	10.53%
1940-49							1	5.26%
1950-59							1	5.26%
1960-69	1	3.03%					2	10.53%
1970-75	2	6.06%					1	5.26%
1976-79					1	5.56%	4	21.05%
1980-85	3	9.09%			3	16.67%	3	15.79%
1986-89	5	15.15%			2	11.11%	3	15.79%
1990-95	10	30.30%	1	6.25%	3	16.67%		
1996-1999	7	21.21%	8	50.00%	5	27.78%	1	5.26%
2000-2003	5	15.15%	7	43.75%	4	22.22%	1	5.26%
Total Responding	33	100.00%	16	100.00%	18	105.56%	19	100.00%

Source: M/WBE personal interviews and focus group participants.

Organizational Structure

Across ethnicity and gender the vast majority of participants are structured as a partnership as shown in **Exhibit 6-6**. Minority and women-owned firms had a higher percentage of sole proprietors than did nonminority males.

Gross Revenues

Information concerning gross revenues is also summarized in **Exhibit 6-6**. Of the African American-owned firms interviewed, three firms had gross revenues over \$4.5 million. Only one African American-owned firm had gross revenues in excess of \$10 million. Two nonminority women-owned firms had gross revenues greater than \$10 million, while no Hispanic American-Owned firms had gross revenues in excess of \$10 million. In contrast, the nonminority male-owned firms had 11 (57%) firms with gross revenues in excess of \$10 million.

**EXHIBIT 6-6
CITY OF CHARLOTTE, MECKLENBURG COUNTY, AND CHARLOTTE-
MECKLENBURG SCHOOLS
PERSONAL INTERVIEWS AND FOCUS GROUPS
SELECTED DEMOGRAPHICS**

Category	African American		Hispanic American		Nonminority Women		Nonminority Male	
	Total	%	Total	%	Total	%	Total	%
Organizational Structure								
Sole Proprietorship	7	20.59%	3	18.75%	5	26.32%	1	5.26%
Partnership	0	0.00%	0	0.00%	1	5.26%	2	10.53%
Corporation	27	79.41%	12	75.00%	13	68.42%	16	84.21%
Other	0	0.00%	1	6.25%	0	0.00%	0	0.00%
Total Responding	34	100.00%	16	100.00%	19	100.00%	19	100.00%
Gross Revenues								
Less than \$100,000	9	28.13%	2	16.67%	2	11.11%	0	0.00%
\$100,001 to \$500,000	11	34.38%	6	50.00%	5	27.78%	1	5.26%
\$500,001 to \$1,500,000	6	18.75%	2	16.67%	3	16.67%	1	5.26%
\$1,500,001 to \$4,500,000	3	9.38%	2	16.67%	6	33.33%	4	21.05%
\$4,500,001 to \$10 million	2	6.25%	0	0.00%	0	0.00%	2	10.53%
More than \$10 million	1	3.13%	0	0.00%	2	11.11%	11	57.89%
Total Responding	32	100.00%	12	100.00%	18	100.00%	19	100.00%
Number of Employees								
0	4	11.76%	2	14.29%	3	15.79%	1	5.26%
1 - 10	17	50.00%	8	57.14%	8	42.11%	3	15.79%
11 - 50	13	38.24%	4	28.57%	7	36.84%	6	31.58%
51 - 75	0	0.00%	0	0.00%	0	0.00%	1	5.26%
Over 75	0	0.00%	0	0.00%	1	5.26%	8	42.11%
Total Responding	34	100.00%	14	100.00%	19	100.00%	19	100.00%

Source: M/WBE personal interviews and focus group participants.

Firm Size

Seventeen of the 34 African American firms participating had between 1 and 10 employees as shown in **Exhibit 6-6**. No African American firm had over 50 employees. Eight Hispanic firms had between 1 and 10 employees. No Hispanic firms had over 50 employees. Of the women-owned firms, 42 percent had between 1 and 10 employees. Thirty-seven percent of the WBEs had between 11 and 50 employees, with one firm having more than 75 employees. Forty-two percent of nonminority male-owned firms had over 75 employees. Nonminority male-owned firms tend to have more employees than minority or women-owned firms.

6.4 Findings

In this section, we present our findings based on anecdotal data collected for this study. The findings are presented in five sections:

- 6.4.1 Loans, Bonds, and Insurance Experience
- 6.4.2 Public and Private Sector Work Experience
- 6.4.3 Work Experience with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools
- 6.4.4 Discriminatory Experiences
- 6.4.5 Perceptions of Business Attitudes, Business Practices and MWBEs

6.4.1 Loans, Bonds, and Insurance Experience

Survey respondents were asked if they had applied for a business start-up loan, operating capital loan, performance bond, bid bond, equipment loan, commercial liability insurance, and professional liability insurance. In addition, for those who did apply, they were asked if they were approved or not. The percentages shown in **Exhibit 6-7** are of total responses in that subgroup.

From **Exhibit 6-7**, the following observations can be made:

- Fewer than 6 percent of total respondents have applied for a business start-up loan. However, minority-owned firms are more likely to apply for a business start-up loan than nonminority women-owned firms or nonminority male-owned firms. Ten percent of the African American-owned firms applied for start-up loans compared with 4 percent of nonminority women-owned firms and 5 percent of nonminority male-owned firms. Although the majority who applied for start-up loans received them, respondents who were nonminority male-owned were approved almost every time, whereas African Americans were approved less than 50 percent of the time.
- Fourteen percent indicated they had applied for an operating capital loan. However, again, African Americans were much more likely to have been rejected than all other categories, minority and otherwise.
- Of the sample who indicated they had applied for a performance bond, approval rates were relatively similar across race/ethnic/gender categories.
- Roughly one-sixth of the sample (17%), responded to the item asking, “If you were denied (for any of the above), were you denied due to race or gender?” Respondents representing African American-owned firms (25 percent who responded to this item), nonminority woman-owned firms (9 percent who responded to this item), and nonminority male-owned firms (3 percent who responded to this item), indicated they had felt they had been victims of discrimination. Other categories, however, did not report perceptions of discrimination but, again, smaller cell sizes for these groups do not permit a firm conclusion.

Patterns in the survey data indicate that minority and women-owned firms were more likely to apply for all categories of loan and insurance than were nonminority male-owned firms, but the latter were slightly more likely to apply for the bond categories.

The vendors who participated in the interviews and focus groups identified the following as barriers to their growth and success:

- cash flow and cash management
- securing bonding
- building relationships with primes and owners
- building capacity
- developing an experienced workforce
- slow pay
- paperwork and bureaucracy

Nonminority-owned prime contractors in some instances confirmed the experiences cited by minority and women-owned firms.

**EXHIBIT 6-7
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG
SCHOOLS ON-LINE VENDOR SURVEY
EXPERIENCE WITH LOANS, BONDS, AND INSURANCE
SINCE 1998 BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER**

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total	
<i>Business start-up loan</i>									
Applied	10%	12%	13%	13%	4%	7%	5%	6%	n=234
Approved	4%	12%	3%	13%	4%	5%	4%	4%	n=234
<i>Operating capital loan</i>									
Applied	15%	15%	9%	7%	15%	14%	13%	14%	n=335
Approved	8%	15%	9%	7%	13%	11%	12%	11%	n=335
<i>Performance bond</i>									
Applied	4%	12%	3%	13%	7%	6%	6%	6%	n=243
Approved	4%	12%	3%	13%	7%	6%	6%	6%	n=243
<i>Bid bond</i>									
Applied	7%	12%	3%	20%	6%	7%	7%	7%	n=256
Approved	4%	12%	3%	7%	6%	6%	7%	7%	n=256
<i>Equipment loan</i>									
Applied	13%	18%	9%	13%	15%	14%	10%	12%	n=320
Approved	9%	18%	9%	13%	14%	12%	10%	11%	n=320
<i>Commercial liability insurance</i>									
Applied	25%	24%	16%	40%	28%	26%	20%	23%	n=484
Approved	21%	24%	16%	40%	28%	25%	20%	22%	n=484
<i>Professional liability insurance</i>									
Applied	19%	21%	19%	27%	23%	21%	15%	18%	n=407
Approved	16%	21%	19%	27%	23%	20%	15%	18%	n=407
<i>Denial in any of the above due to race or gender?</i>									
Yes	25%	0%	0%	0%	9%	16%	3%	10%	n=20
No	29%	14%	0%	25%	37%	29%	47%	37%	n=72
Don't know	45%	86%	100%	75%	54%	55%	50%	53%	n=102

Source: MGT On-line Survey of Businesses, February–April, 2003
 Percentages shown are of the total respondents in each subcategory. (i.e. 10% of the African American respondents have applied for a loan)

6.4.2 Public and Private Sector Work Experience

Surveyed firms were asked about their work experience in the public and private sectors. **Exhibit 6-8** provides information on the percentage of firms that worked as a prime contractor, prime consultant, prime vendor, or subcontractor; the number of times firms bid as subcontractor or subconsultant; the number of times firms were asked by a prime to be a subcontractor; and the number of times firms were hired by a prime as a subcontractor. The results are presented by race/ethnicity and gender. The following general observations can be made.

- The percentage of nonminority male-owned and minority-owned firms that reported as never having served as a prime contractor or prime consultant was equivalent (62%), although nonminority male-owned firms reported serving as prime vendors far more frequently than minority and women-owned businesses (e.g., 43 percent of nonminority male-owned firms reported having served more than 100 times as vendors, compared with 22 percent of all M/WBE firms). M/WBE firms were slightly more likely to have served as a subcontractor when compared with nonminority male-owned firms.
- On the whole, minority and nonminority women-owned firms were slightly more likely to have bid as a subcontractor or subconsultant than were nonminority male-owned firms. A higher percentage of M/WBE firms (27%) reported having submitted more than 100 bids when compared with nonminority male-owned firms (23%), with a third of nonminority woman-owned firms reporting having submitted 100 or more bids.
- When nonminority male-owned firms were compared with minority-owned firms, the percentage of those who had never been asked to serve as a subcontractor was equivalent. Although African American and Asian American-owned firms tended to have been asked more frequently in the categories “1 – 10 times” and “11 to 99 times,” nonminority woman-owned firms were far more likely to have been asked “more than 100 times” than any other group (of adequate sample size).
- The rate at which firms were hired as a subcontractor or subconsultant was roughly equivalent for nonminority male-owned firms and M/WBEs as a whole. However, among minority subsamples of adequate size, only African Americans failed to report being hired “more than 100 times” as compared with 13 percent for M/WBEs, 20 percent for nonminority women-owned firms, and 15 percent for nonminority male-owned firms, respectively.

EXHIBIT 6-8
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
WORK EXPERIENCE BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Number of Times as Prime Contractor since 1998</i>								<i>n=616</i>
Never	73%	50%	50%	36%	60%	62%	62%	62%
1 - 10 times	15%	27%	17%	9%	11%	14%	13%	13%
11 - 50 times	4%	5%	21%	36%	6%	7%	9%	8%
51 - 100 times	5%	0%	4%	0%	6%	5%	4%	4%
More than 100 times	3%	18%	8%	18%	18%	12%	13%	13%
<i>Number of Times as Prime Consultant since 1998</i>								<i>n=587</i>
Never	74%	74%	57%	75%	58%	65%	63%	64%
1 - 10 times	17%	0%	14%	0%	17%	15%	13%	14%
11 - 50 times	7%	16%	19%	25%	8%	9%	9%	9%
51 - 100 times	2%	5%	5%	0%	6%	4%	4%	4%
More than 100 times	0%	5%	5%	0%	11%	6%	12%	9%
<i>Number of Times as Prime Vendor since 1998</i>								<i>n=708</i>
Never	61%	54%	36%	33%	41%	48%	35%	41%
1 - 10 times	25%	8%	32%	8%	13%	18%	11%	14%
11 - 50 times	4%	8%	14%	17%	9%	8%	8%	8%
51 - 100 times	5%	0%	5%	8%	5%	5%	3%	4%
More than 100 times	4%	29%	14%	33%	32%	22%	43%	33%
<i>Number of Times as Subcontractor since 1998</i>								<i>n=523</i>
Never	46%	32%	44%	22%	44%	43%	52%	48%
1 - 10 times	39%	37%	33%	22%	30%	32%	25%	28%
11 - 50 times	4%	11%	17%	11%	11%	10%	10%	10%
51 - 100 times	11%	11%	0%	0%	4%	6%	3%	4%
More than 100 times	0%	11%	6%	44%	11%	10%	10%	10%

Source: MGT On-line Survey of Businesses, February–April 2003

EXHIBIT 6-8 (Continued)
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
WORK EXPERIENCE BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Number of times bid as a subcontractor or subconsultant</i>								<i>n=252</i>
Never	21%	22%	25%	43%	30%	28%	35%	32%
1 to 10 times	38%	33%	50%	0%	22%	27%	18%	23%
11 to 99 times	24%	11%	13%	43%	14%	18%	23%	21%
More than 100 times	17%	33%	13%	14%	33%	27%	23%	25%
<i>Number of times asked to be a subcontractor or subconsultant</i>								<i>n=253</i>
Never	26%	50%	22%	29%	31%	30%	31%	31%
1 to 10 times	35%	10%	67%	29%	26%	30%	25%	28%
11 to 99 times	29%	10%	11%	14%	16%	18%	24%	21%
More than 100 times	10%	30%	0%	29%	26%	21%	20%	20%
<i>Number of times hired as a subcontractor or subconsultant</i>								<i>n=257</i>
Never	28%	27%	50%	43%	36%	34%	30%	32%
1 to 10 times	38%	18%	38%	14%	31%	31%	31%	31%
11 to 99 times	34%	36%	0%	43%	13%	21%	24%	23%
More than 100 times	0%	18%	13%	0%	20%	13%	15%	14%

Source: MGT On-line Survey of Businesses, February–April 2003.

Firms indicating they had served either as a prime contractor or as a prime consultant since 1998 reported the frequency of their use of subcontractors or subconsultants, in general, and their utilization of M/WBEs for federal, state, and local agency projects, in particular. Firms participating in the survey were also asked to rate their experience with subcontractors or subconsultants by race/ethnicity and gender categories. **Exhibit 6-9** indicates the percentage of usage of subcontractors or subconsultants by primes.

- Overall, all subgroups reported similar rates of utilization of subcontractors, regardless of race, gender, or ethnicity, although African Americans tended to use subs more often and nonminority woman-owned firms less often than did nonminority male-owned firms or M/WBEs as a whole.
- M/WBE respondents reported utilizing M/WBEs “very often” as subcontractors or subconsultants for federal, state, and local agency projects with much greater frequency than was reported for nonminority male-owned firms. In all categories of agency, as well as in the private sector, respondents reported utilizing African American firms “very often” more frequently than any other group, and two to three times more frequently than for nonminority male-owned firms.
- Satisfaction with the utilization of three categories of subs—M/WBEs, nonminority woman-owned firms, and nonminority male-owned firms—seemed to vary as a function of race: that is, nonminorities, male or female, tended to report “Excellent/Good” experiences more frequently when referring to other nonminority-owned firms, and M/WBEs tended to report “Excellent/Good” experiences more frequently when referring to other M/WBEs.

EXHIBIT 6-9
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH SUBCONTRACTORS AND SUBCONSULTANTS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Number of Times Used Subcontractors or Subconsultants since 1998</i>								<i>n=481</i>
Never	55%	62%	35%	63%	72%	64%	66%	65%
1 - 10 times	28%	15%	47%	25%	16%	22%	20%	21%
11 - 50 times	8%	15%	12%	0%	8%	8%	7%	7%
51 - 100 times	9%	8%	0%	0%	3%	4%	3%	4%
More than 100 times	0%	0%	6%	13%	2%	2%	4%	3%
<i>Used M/WBEs for Federal Projects since 1998</i>								<i>n=277</i>
Very Often	58%	17%	38%	20%	26%	34%	22%	28%
Sometimes	16%	50%	23%	20%	32%	28%	38%	34%
Seldom	10%	17%	15%	20%	10%	11%	11%	11%
Never	16%	17%	23%	40%	33%	27%	28%	27%
<i>Used M/WBEs for State Projects since 1998</i>								<i>n=280</i>
Very Often	63%	25%	54%	40%	26%	37%	23%	30%
Sometimes	20%	50%	15%	20%	31%	28%	40%	35%
Seldom	3%	17%	15%	20%	15%	13%	11%	12%
Never	13%	8%	15%	20%	28%	22%	26%	24%
<i>Used M/WBEs for Local Agency Projects since 1998</i>								<i>n=296</i>
Very Often	59%	33%	43%	33%	36%	42%	23%	32%
Sometimes	22%	50%	29%	33%	35%	32%	44%	38%
Seldom	6%	0%	14%	33%	13%	11%	12%	11%
Never	13%	17%	14%	0%	17%	15%	21%	18%

EXHIBIT 6-9 (Continued)
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH SUBCONTRACTORS AND SUBCONSULTANTS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Used M/WBEs for Private Projects since 1998</i>								<i>n=301</i>
Very Often	58%	25%	43%	33%	32%	38%	16%	27%
Sometimes	24%	42%	36%	33%	45%	39%	50%	45%
Seldom	6%	17%	21%	17%	10%	11%	18%	15%
Never	12%	17%	0%	17%	13%	12%	16%	14%
<i>Rate Experience with Minority Men and Women Subs</i>								<i>n=284</i>
Excellent/Good	91%	100%	79%	67%	96%	92%	88%	90%
Fair/Poor	9%	0%	21%	33%	4%	8%	12%	10%
<i>Rate Experience with Nonminority Women Subs</i>								<i>n=274</i>
Excellent/Good	87%	100%	82%	67%	98%	93%	92%	92%
Fair/Poor	13%	0%	18%	33%	2%	7%	8%	8%
<i>Rate Experience with Nonminority Male Subs</i>								<i>n=283</i>
Excellent/Good	84%	100%	85%	67%	99%	93%	92%	93%
Fair/Poor	16%	0%	15%	33%	1%	7%	8%	7%

Source: MGT Survey of Businesses, March–April 2003.

As shown in **Exhibit 6-10**, in general, a considerable majority of subs rated their experience with primes as excellent or good. African American-owned firms had the lowest satisfaction, with 32 percent indicating their experience with a prime as being fair or poor. Some situations confronted by firms in the public and private sectors may have an influence on their experiences with primes. **Exhibit 6-10** shows the percentage of firms, compared with their total sample representation, that indicated they have problematic treatment as prospective subcontractors or subcontractors by prime contractors. For example:

- More than one-fifth of subcontractors provided a bid to prime, but received no response (20%).
- More than one-sixth of subcontractors indicated they had completed a job, but that payment was substantially delayed (17%).
- Roughly one-eighth of subcontractors indicated they were pressured by primes to lower their quote or bid (12%).

African American-owned firms tended to perceive more egregious negative treatment than nonminority male-owned firms in the following categories: not receiving a response to a bid (26% vs. 18%); in being dropped by the prime after a contract was awarded (9% vs. 4%); and in being held to higher standards than were other subs (11% vs. 2%).

In other categories of treatment of subs by primes for race/ethnic/gender categories in which cell sizes permitted a supportable conclusion, rates of response were not notably disparate.

Participants in the personal interviews and focus groups shared the following comments regarding practices of prime contractors:

- “Putting wives into business has hurt us. I’ve been in meetings when the woman owners did not know what was going on. There are a lot of fronts in trucking.” – *African American contractor*
- “They say they are going to self-perform the work when they will actually sub out the work.” – *African American contractor*
- “Lack of notification or late notification of bids.” – *African American contractor*

EXHIBIT 6-10
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH PRIME CONTRACTORS BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Rate Experience with Primes since 1998</i>								<i>n=223</i>
Excellent/Good	68%	91%	88%	80%	86%	82%	88%	85%
Fair/Poor	32%	9%	13%	20%	14%	18%	12%	15%
<i>Prime Never Responded to Sub Bid/Quote</i>	26%	27%	11%	40%	20%	22%	18%	<i>n=219</i> 20%
<i>Asked to be a "front" for Nonminority Firm</i>	5%	12%	6%	0%	1%	3%	1%	<i>n=23</i> 2%
<i>Pressured to lower bid</i>	10%	21%	8%	13%	13%	12%	12%	<i>n=133</i> 12%
<i>Paid less than negotiated contract amount</i>	5%	12%	3%	13%	4%	5%	6%	<i>n=61</i> 6%
<i>Dropped after Prime received contract</i>	9%	9%	6%	0%	3%	5%	4%	<i>n=50</i> 5%
<i>Delayed payment after job completion</i>	16%	24%	17%	27%	15%	16%	17%	<i>n=183</i> 17%
<i>Completed job, never paid</i>	6%	6%	0%	0%	5%	5%	7%	<i>n=67</i> 6%
<i>Did other or less work than agreed</i>	5%	6%	0%	7%	4%	4%	4%	<i>n=46</i> 4%
<i>Held to higher standards than other subs</i>	11%	0%	0%	7%	1%	4%	2%	<i>n=34</i> 3%
<i>Other experiences</i>	8%	9%	3%	13%	5%	6%	2%	<i>n=46</i> 4%

Source: MGT On-line Survey of Businesses, February–April 2003

- “Shopped my bid. A contractor who was a driver for me was told he would get the work if he could get some trucks together.” – *African American contractor*
- “It’s how the contractors shift the bid.” – *African American contractor*
- “Most GCs have their own ‘inside WBE.’” – *African American contractor*
- “Often I do not get paid. This can occur in a situation where the subcontractors are told, ‘I told you; you didn’t understand me, but I told you.’ This is not true. The prime goes on to reference the contract. “Look at this. This says in the contract and you didn’t read it.” - *Hispanic contractor*
- “I was back charged for work that needed to be fixed up on the punch list. A repair they could fix for \$150 is performed by the prime and they are back charged \$1,000.” –*Hispanic contractor*
- “After the project is awarded, the scope and fee are reduced.” – *Women-owned professional service firm*
- “Bid shopping is rampant” –*African American contractor*

An African American contractor reported in a personal interview that he experienced discriminatory attitudes from prime contractors. “I was told, ‘You people need to learn to manage your money better,’ or you people need to learn this or that.” Another contractor reported that a prime contractor told him that he couldn’t do the job because he had too much work going on. “We’re always being told how to run our company.”

Nonminority male contractors had the following perceptions related to working in the public sector:

- A nonminority male contractor stated that there is more pressure to use M/WBEs in the public sector than the private sector. He will use M/WBEs in the private sector if they are “good “ firms. His concern is that, “in the private sector, if you don’t meet the schedule, you will not be invited back to bid subsequent work.” He also stated that he is aware of some primes “pushing the envelope” by indicating that they self-perform more work than they actually do. In the early years, there were MBE fronts. Now he sees women-owned firms being used that are not disadvantaged.
- A nonminority male contractor stated that there is “not as compelling a case [to use M/WBEs] in private sector work.”

- A nonminority male contractor stated that on private sector work, he uses preferred subcontractors verses having to take the low bidders for public sector projects.

6.4.3 Work Experience with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools

Exhibit 6-11 reports participants' observations regarding their experiences in working with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools since 1998.

- The reported rate of utilization of firms by the three agencies did not seem to vary greatly as a function of race, ethnicity or gender, with M/WBE firms, as a group, and nonminority male-owned firms reporting having worked with each agency at a rate between 30 and 35 percent.
- African American firms reported working most frequently with the City of Charlotte, and nonminority male-owned firms reported working least frequently with CMS.
- Bid rates for projects with all three agencies varied as a function of race; that is, race and ethnic minorities reported having "never bid" for any agency projects much more frequently than did nonminority woman-owned firms and nonminority male-owned firms, which also reported more frequently having bid "11 or more times."
- Award rates for projects with all three agencies also varied as a function of race (perhaps predictably); that is, race and ethnic minorities reported that they were "never awarded" for any agency projects much more frequently than did nonminority woman-owned firms and nonminority male-owned firms, which also reported more frequently having been awarded projects "11 or more times."
- One-third of M/WBE respondents, including one-half of African American respondents, agreed that bid specifications are written with the intention of limiting competition, compared with one-quarter of respondents from nonminority male-owned firms.
- Most respondents (roughly two-thirds to three-quarters) indicated they did not know or had no opinion in response to an item asking if biased inspectors created "informal watch lists," although a higher percentage of African American firms agreed with this statement (24%) than did respondents representing nonminority male-owned firms (12%), or M/WBEs as a whole (16%).

**EXHIBIT 6-11
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH CHARLOTTE AREA AGENCIES BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER**

	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total	
<i>Since 1998, have you worked with:</i>									
The City of Charlotte?	39%	33%	38%	35%	33%	35%	35%	35%	n=341
The County of Mecklenburg?	29%	33%	31%	41%	34%	33%	35%	34%	n=335
The Charlotte-Mecklenburg Schools?	32%	33%	31%	24%	33%	32%	30%	31%	n=303
<i>Bids submitted to any or all 3 agencies since 1998?</i> n=714									
Never bid	55%	64%	74%	60%	37%	47%	34%	41%	
1 to 10 bids	37%	32%	26%	30%	49%	42%	48%	45%	
11 or more bids	8%	5%	0%	10%	14%	11%	18%	14%	
<i>Jobs awarded by any or all 3 agencies since 1998?</i> n=703									
Never awarded	74%	68%	87%	63%	41%	57%	37%	47%	
1 to 10 awards	24%	32%	13%	25%	49%	37%	51%	44%	
11 or more awards	2%	0%	0%	13%	9%	6%	12%	9%	
<i>My company was interested in doing business in the past</i>	13%	3%	2%	1%	26%	44%	56%	100%	n=534
<i>My company is interested in doing business now</i>	16%	3%	3%	1%	25%	49%	51%	100%	n=813
<i>My company is interested in doing business in the future</i>	15%	3%	3%	1%	26%	48%	52%	100%	n=767
<i>None of the above reflect my company's interest</i>	13%	4%	4%	4%	29%	54%	46%	100%	n=24

Source: MGT On-line Survey of Businesses, February–April 2003

EXHIBIT 6-11 (Continued)
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH CHARLOTTE AREA AGENCIES BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Barriers to obtaining work</i>								
Performance bond requirements (n=46)	9%	5%	12%	25%	4%	8%	9%	8%
Insurance requirements (n=15)	2%	5%	4%	0%	4%	3%	2%	3%
Bid specifications (n=78)	15%	19%	8%	13%	10%	13%	15%	14%
Limited time to prepare a bid package/quote (n=68)	11%	14%	0%	25%	12%	11%	13%	12%
Limited info received on pending projects (n=127)	21%	33%	15%	25%	25%	23%	21%	22%
How Agencies (mis)classify my services (n=87)	14%	5%	23%	13%	19%	16%	14%	15%
Lack of experience (n=23)	3%	10%	15%	0%	2%	4%	4%	4%
Lack of personnel (n=20)	6%	0%	8%	0%	1%	4%	3%	3%
Purchasing/contracting process (n=69)	9%	5%	15%	0%	14%	11%	14%	12%
Contract too expensive to bid? (n=40)	9%	5%	0%	0%	9%	8%	5%	7%
<i>Encountered barriers with:</i>								
The City of Charlotte? (n=387)	36%	31%	35%	35%	33%	35%	34%	34%
The County of Mecklenburg? (n=381)	33%	38%	33%	30%	35%	34%	33%	34%
The Charlotte-Mecklenburg Schools? (n=365)	31%	31%	31%	35%	32%	32%	33%	32%
<i>Bid specifications are written to limit competition</i>								
Strongly agree/agree	48%	28%	38%	22%	23%	33%	23%	n=550 28%
Disagree/strongly disagree	8%	24%	14%	44%	20%	17%	30%	23%
Neutral/do not know	44%	48%	48%	33%	57%	50%	47%	49%
<i>Informal "watch lists" are created by biased inspectors</i>								
Strongly agree/agree	24%	22%	29%	13%	8%	16%	12%	n=457 14%
Disagree/strongly disagree	6%	17%	12%	25%	10%	10%	16%	13%
Neutral/do not know	69%	61%	59%	63%	82%	73%	72%	73%

Source: MGT On-line Survey of Businesses, February–April 2003.

Respondents indicated that a number of factors have affected their ability to conduct business with the three agencies. The three most common factors included: limited information received on pending projects (M/WBEs as a group, 23 percent; nonminority male-owned firms, 21 percent); how agencies classified a company's services (M/WBEs as a group, 16 percent; nonminority male-owned firms, 14 percent); and problems with bid specifications (M/WBEs as a group, 13 percent; nonminority male-owned firms, 15 percent). The rate at which respondents reported barriers with each of the three agencies was roughly equivalent, regardless of race, ethnicity, or gender of firm ownership.

During the personal interviews and focus groups, vendors cited examples of challenges in doing business with the City, the County, and CMS. Some of the vendors felt they had been blackballed, while others felt they were treated differently during the inspection process. In addition, vendors provided comments related to informal contracts, insulting attitudes, and government practices and policies as provided below.

Blackballed

In a personal interview, an African American professional service firm reported that they had stopped pursuing Mecklenburg County work two years ago and City of Charlotte work three years ago. When asked why, the owner responded:

"[I] was told that City agencies were told not to use [his firm] because he was confrontational and spoke out."

He alleges that his firm was blackballed by the County.

A second African American contractor that bids city, county, and school projects as a subcontractor also stated in a personal interview that he was told that he would be blackballed for:

"saying what he thought on the [name of project]."

In the African American focus group, a concrete contractor who has worked on public projects for the City and CMS indicated:

“A City engineering department inspector called the general contractors and said, ‘Do not use this person.’ And I don’t know the reason. And I just more recently discovered that’s what happened during the last disparity study. I opened my mouth and I talked more and I had questions. That is what I am frightened of now. They don’t want me, at all to do anything, any job. It is nothing to do with my job performance, but just because...”

That same contractor cited another incidence of being blackballed. He noted:

“I bid a job and I got that job. And the general contractor went and looked at all the jobs that I have done—my references. He was very, very satisfied with my job. And now the City tells him (prime contractor) ‘No; do not use [his firm].’ And, he (prime contractor) said, ‘Well, I have looked at his job[s]. I’m satisfied with his job[s]. I’m going to use him.’ The City said to him ‘If you use him, were going to let you out.’ He (prime contractor) said, ‘No; you cannot let me out.’ ...I’m still doing the job, at this moment, despite all the pressure because the company decided to take the risk. Can you imagine that?”

Another concrete contractor that has performed multiple contracts for the city, county, and schools in that focus group indicated that he had also experienced being blackballed. He stated:

“Yes, blackballing, that’s a big problem here. They find out my company was named [name of firm]. They (City) could never find out who was the head; who was the president. So, they was giving me much work, in the year 2001. I’m talking about they had me slam packed with work...but they found that I was black, everything started going down hill. You know, they was cutting me off. I mean I cut around this corner; they cut me off... But my name was in a circle.”

Inspectors

The behavior of City inspectors was raised in interviews with City staff, personal interviews, and the survey. An African American concrete contractor in a personal interview indicated that inspectors act differently depending on the part of the City where the job was being performed.

“[Our work] was scrutinized more in southeast Charlotte than in west Charlotte.”

When asked what the significance of that statement was, the contractor responded that:

“Southeast Charlotte is white and wealthy, while west Charlotte is black.”

Another African American contractor in a personal interview reported that on a contract where his firm was a prime contractor, he “had seven inspectors on one job when the contract only called for one.” He went on to say that on some jobs where he was working as a subcontractor to a majority firm, he “usually doesn’t see inspectors.” He also reported that tests were performed on his job sometimes as many as three in the morning and three in the afternoon. He noted that when he has been a subcontractor to majority-owned firms, often no tests were performed.

Another African American contractor in a personal interview reported that “inspectors don’t respond the same and nit-pick.” Still another African American contractor in a personal interview indicated that because of inspectors, “defamation of character has been added to insurance policies to ‘hold contractors down.’”

An African American utility contractor reported in a focus group that he had negative experiences with CMUD inspectors. In one instance, an inspector had his firm “kicked off the bidders’ list.”

“I mean, we were—my company was out of business, just—just like that; because that [informal contracts] was 85% of our work.”

When asked by the interviewer what the basis was for the inspector’s action, the contractor responded:

“The reason was it would be little petty things like they had collected. It was done over a period of time. The inspector would come out and say ‘Well, I had to tell his crew to put a trench box in; or, they didn’t have a trench box in the excavation.’ Well we were digging it out; it’s on the truck. We hadn’t gotten ready to put it in yet. You know what I mean. We don’t put the trench box in until you do the work...We dig where we excavate the dirt; then, put the trench box in. And one issue that came up, we were doing a job on Queens Road. And, one inspector said, ‘You guys, you shouldn’t leave that trench box in that hole because

there is a power cable running through it'... which the City neglected to make provisions to have it moved, or what have you. Then another inspector comes up and tells my crew, 'Well, you shouldn't have taken that [trench box] out.' Well after they [inspectors] left out, one inspector came back Saturday morning and took pictures of it and said. ' Well, you know you left this trench box out of the excavation. The road could have caved in.' And with the collection of these little petty things like that, they were written in such a fashion as if they were serious. And there is no way you can do this type of work without some issues."

An African American service firm reported in a focus group that she had attended a CMUD partnership breakfast with their (CMUD's) general contractors. Her recollection, which was confirmed by other contractors in the focus group, shed some light on the relationships between inspectors and general contractors.

"And, all of them are buddies; the inspectors, all the GCs they know each other by first names and been knowing each other for 20 years...So even when a minority contractor has a problem with a general contractor, the inspector will not take a balance on the issue and weigh it out and evaluate it justly; because he's [inspector] never going to go against his friend...and will put a name out there not to do business with them. And, there is no policy on whether or not you can take a sub off a list. There is no policy. They [inspectors] will do it by their own judgement."

An African American service firm that has earned larger gross revenues from the private sector—but does public sector work—stated in a personal interview:

"I believe that I am held to a different standard in being awarded work and performing work. This is based my experiences when I worked for a majority-owned firm."

Several African American contractors, when asked about their experiences with inspectors, felt that the City had bad agents representing them in key positions. Often these were "personal biases and prejudices." An African American contractor stated in a personal interview:

"Inspectors are tough on everyone. They are doing their job by being tough. [I] don't think they discriminate."

In the Hispanic focus group, a contractor stated:

“I have seen improvement. I mean, I suppose, originally it was a language barrier; and, of course, some race problems as well. But, it seems to me that the construction market has acknowledged that the Spanish labor is very, very important. So I see improvement in accepting us.”

During the personal interviews and focus groups, other factors related to doing business with the City of Charlotte, Mecklenburg County, and Charlotte-Mecklenburg Schools included informal contracts, insulting attitudes, certification process, and government policies and practices are presented below.

Informal Contracts

An African American contractor reported in a personal interview that he felt discriminated against on the basis of how informal contracts were handled.

“Especially the City and county on small work –informal contracts –don’t provide notification. I find out about it when it’s too late. I’m on everybody’s lists, but I’m never one of three called.”

He went on to suggest a remedy.

“Put a mechanism in place to review all contracts and ensure that everyone is getting a fair chance, proper and timely notification. Keep a log on informal bids...who they call each time and evaluate job performance.”

Another African American contractor reported in a personal interview that he “had only received three calls for informal contracts in all the years I’ve been in business [11 years].”

Insulting Attitudes

Several African American contractors reported in personal interviews that they experienced institutional racism. One stated that “It is not overt. You can’t see it, but you can feel it.” Another in a personal interview stated that “individuals have displayed behaviors that impaired opportunities. It is not institutional, but institutions allow that behavior.”

An African American service firm stated in a personal interview that “some staff have insulting attitudes... The City’s discriminatory practices have spread over into the private sector.”

A second African American professional service firm reported:

“There were always questions of my launching my own business and returning as a major player in the consulting business from an agency where I was formerly employed. However, I checked back and discovered that 17 white men had done the same thing and no one ever questioned them.”

Another African American service firm reported in a personal interview that he experienced discriminatory attitudes from staff. He is often “told he’s ‘a black boy with an attitude’ when white fellows say the same thing.”

An African American carpentry contractor reported in a focus group that he left public sector work because he was being discriminated against.

Interviewer: “Were you ever the low bidder and didn’t end up with the job?”

Contractor: “No, most of them just seem to come to me. You know, people I was meeting. And, I get in on one project, and the other project just be given to me.”

Interviewer: “By the primes?”

Contractor: “Yes.”

Interviewer: “Was this in the private side or public?”

Contractor: “Public.”

Interviewer: “Well, if they were giving you work, then why did you leave the public sector then?”

Contractor: “Because my company turned black. When I first started out, all my employees were white. And then, when I started bringing in the black folks...”

Interviewer: “Wait a moment. Now you’ve always owned the firm?”

Contractor: “Yes, sole proprietor.”

Interviewer: “But you had a number of white folk working for you?”

Contractor: “Yes, three or four.”

Interviewer: “And then you began to hire some black folk and put them on the job? And then the work stopped coming?”

Contractor: “Practically went bone dry.”

An African American vendor in a personal interview who has done limited work in the public sector cited an incident in the private sector. He reported on what he labeled a “general feeling toward MBEs that the ‘check and debt’ has been paid and now whites have hostility that MBEs are getting an unfair advantage...a leg up.” He noted that the recession has exacerbated the problem, as white employees are being hit hard with layoffs due to the economy. He stated that some purchasing agents have said, “I will not make MBEs rich.”

In the Hispanic focus group, a contractor indicated that on a job site, his employees were not allowed to park their cars in the main parking area. “All the rest of the subcontractors were allowed to park in that specific place, but not us. We had to park far away from the job site.” They were told the reason is the trash that is thrown around and they “won’t follow the rules.”

Another Hispanic contractor in the focus group reported that the general contractors prefer that the supervisor on the job be “an American guy. They believe in the American people [more] than the other Spanish people. They believe more in the American guy, not for communication.”

The Hispanic contractors in the focus group agreed that they get treated differently. They have more pressure put on them to get the work done. One reported:

“The contractors don’t pay us overtime. Don’t pay if you work Saturday and Sundays. They expect you to work on Sundays. ‘I need this tomorrow; move, move, move it.’ They don’t care. ...but if you have a company, which is all with American people, they don’t work, almost never, during weekends. They work 40 hours...only Monday, Tuesday, Wednesday, and Thursday and that’s it. If you are an Hispanic subcontractor, you are expected to work during the weekends.”

A WBE professional related experiences of discrimination in other public and private sector organizations. “The blatant stuff is not like it used to be...years ago they were really out there willing to put you down because you didn’t have the credentials. You still have to do twice the amount of work for half the fee.”

Interview participants shared the following comments regarding certification:

- An African American contractor responded that, “in the public sector it’s about getting the low number.”
- An African American contractor responded, “ [I] received calls as a result of being on the list, but not getting work. If you’re nonresponsive when called, you stay on their list.”
- An African American vendor stated, “It’s helpful. It is a mechanism to inform government agencies as to who they were. Suggest it was a legitimate business. Another working tool.”
- An African American vendor stated, “It hasn’t help level the playing field. If anything, it places a label on firms. I don’t use the MBE designation in the private sector.”
- An African American contractor responded, “It helps get my foot in the door.”
- An African American service firm stated, “being on the list helped get work.”
- An Hispanic service firm indicated, “It resulted in his receiving calls.”
- An Hispanic professional service firm stated that “it did open doors.”

In response to questions concerning perceptions of favoritism,

- An African American vendor stated that “it’s like a comfortable old shoe.”
- An African American service firm stated, “It is practiced, especially by the City and the county on informals.”

Governmental Practices and Procedures

Typical comments from African American owned businesses regarding governmental practices and procedures were:

- “Bid shopping is rampant.”
- “City tends to call firms they’ve done business with before.”

- “Slow pay.”
- “Procedures for professional services where, too often, there is no public notice of bid opportunity.”
- “Bundling of projects, especially with the cutback on inspectors given as a reason.”
- “Culture is decentralized, therefore have to base bid proposals on a departmental basis and can’t offer best prices due to lack of volume.”

Typical comments from Hispanic-owned businesses:

- Shopping bids
- Bundling tasks

6.4.4 Discriminatory Experience

Exhibit 6-12 shows respondent perceptions of discriminatory experiences by the owner’s race, ethnicity, or gender. Five percent of those who responded to these items indicated that they had experienced discrimination because of race, ethnicity, or gender on one or more occasions (1% very often, 2% sometimes, and 2% seldom). More than two-fifths (62%) reported they had not experienced discrimination, but nearly a third (31%) indicated they did not know. Eleven percent of M/WBE owners who responded to this portion of the survey reported experiencing discrimination on at least an occasional basis (46 of 434). By M/WBE category, this included: 23 African Americans, 15 nonminority women, 3 Hispanic Americans, 4 Asian Americans, and 1 Native American.

Firms also responded to more detailed requests for information about their experiences, inquiring as to type, basis, and time frame. These results are summarized in Part B of **Exhibit 6-12**. Part B of the exhibit summarizes results as the response frequency for each item. Because of relatively small cell sizes within the different response categories, it is inadvisable to assert trends from these data, although some straightforward observations may be made:

- The most frequent form of discrimination reported by respondents was in the form of discriminatory “actions taken” (15) followed by “verbal comments” (12).

EXHIBIT 6-12
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY
EXPERIENCE WITH DISCRIMINATION BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

Demographic	Race/Ethnicity							Total
	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	
Sample size								n=883
Part A: Frequency of Discrimination¹								
Experienced discrimination due to race, ethnicity, or gender of the owner since 1998?								
Yes, very often	3%	7%	4%	0%	2%	3%	0%	1%
Yes, sometimes	9%	3%	11%	0%	2%	5%	0%	2%
Yes, seldom	5%	0%	0%	8%	3%	3%	1%	2%
Never	29%	33%	43%	50%	67%	50%	73%	62%
Don't know	54%	57%	43%	42%	27%	39%	24%	31%
Total number of respondents	n=137	n=30	n=28	n=12	n=227	n=434	n=449	n=883
Number who experienced discrimination	n=23	n=3	n=4	n=1	n=15	n=46	n=10	n=56
Part B: Profile of Discrimination²								
Nature of Occurrence	n=9	n=0	n=6	n=0	n=5		n=8	n=28
Verbal comments	2		2		3	7	5	12
Written statements							1	1
Actions taken	7		4		2	13	2	15
Basis of discrimination	n=14	n=2	n=3	n=0	n=5		n=10	n=34
Owner's Race/Ethnicity	11	1	2		2	16	7	23
Owner's Sex	3	1	1		3	8	3	11
Time of occurrence	n=10	n=0	n=2	n=0	n=3		n=11	n=26
Precontract	5		2		1	8	9	17
Postcontract	5				2	7	2	9
Source of Discrimination	n=29	n=5	n=5	n=1	n=16		n=13	n=69
City of Charlotte	6	1	1		2	10	2	12
County of Mecklenburg	6	2			2	10	2	12
Charlotte-Mecklenburg Schools	4	1	1		1	7	2	9
Other Sources of Discrimination	13	1	3	1	11	29	7	36

Source: MGT On-line Survey of Businesses, February–April 2003.

¹ Part A Total reports responses as a percentage of the race/ethnicity/gender subsample by profile item.

² Part B reports response frequency by profile item.

- The most common basis for discrimination perceived by respondents was the owner's race/ethnicity (23 responses), followed by owner's sex (11).
- When it occurred, discrimination tended to take place in the precontract stage (17 times) rather than at postcontract award (9).
- Among perceived "sources of discrimination," in general, respondents attributed a relatively small number of instances of discrimination to all three agencies equally (i.e., City of Charlotte, 12; Mecklenburg County, 12; and CMS, 9), with discrimination being attributed most frequently to "other sources" (36 instances to private sector operators).

During the personal interviews and focus groups, some vendors felt that there was discriminatory behavior related to change orders and being low bid but not awarded the contract, as provided below.

An African American contractor reported in a personal interview that he was treated differently when it came to processing change orders. Inspectors told him what they would pay him on work beyond the scope of his bid. One inspector told him, "You own the truck. What's it costing you?" When asked his response, the contractor reported that he was intimidated and didn't protest the action. He was aware of the fact that white contractors usually charge more for change orders than their contract bid price.

Another African American contractor reported in a personal interview that he "couldn't assume they'd (change orders) be paid. If so, not at the rate they bid." He was told that "It doesn't take that amount of money to do it."

Still another African American contractor who bids multiple jobs with the owners reported in a personal interview:

"[I] don't get treated the same. I'm expected to do more in faster time for less money. This is especially so when it comes to change order work. They make you do it under the original scope."

When asked if all contractors were treated the same with respect to being paid for change orders, the contractor responded:

“They can get a higher fee for doing change order work.”

Several Hispanic contractors stated in a focus group that sometimes the change orders they submit are approved, but they are informed it was not approved because their price was “too high.” The prime ends up keeping the difference. In that same discussion, another Hispanic contractor stated:

“Sometimes, we are so much under pressure that we end up doing the change order before the change order is approved. And, when the times it’s approved, they might say, ‘It’s not approved,’ after it’s been done. That happens.”

In that focus group, another Hispanic contractor indicated that they are threatened to perform the change orders. They have been told that, “You don’t want to do it, it’s okay. I get with other guys to get it done.”

An African American professional service firm reported in a personal interview:

“I was selected with the design team at Discovery Place. Then I found out that I was not part of the team. My firm’s name was on the list... I got pushed totally off the job and got nothing.”

When asked how he did not get to do work, he responded:

“I was told by the architect that my ‘firm could not be found.’ So they needed to replace me... I was never called [about the job] and found out about the work when I drove by the facility... I wrote a letter of protest and the owner and architect acknowledged the mistake and just went on. The architect told me that ‘they would make it up to me.’ It was like I got mugged and nothing happened.”

The same professional service firm got pushed out of a CMS project two years ago.

“I was told by the architect I was too small and can’t meet their deadline and goal. Instead of earning \$120 thousand, I only earned \$15 thousand. I had interviewed with the architect at CMS for the job. But after they got the job, the architect sent me a letter that I was off the project. I basically got cheated. It was like being robbed.”

Another African American concrete contractor reported in a focus group that he, too, was not given a job as a subcontractor even though his bid was low.

"I bid the job low. I did not get the job. I asked the gentleman, 'Could you open your bid book up and let me see what he bid and what I bid?' He bid \$116,000 on the job and I bid \$100,000 even. They still gave the job to the \$116,000 man and didn't give it to me."

When asked what they said to him, the contractor responded:

"They felt that this man was going to go in and he was going to do more work than I was."

When asked how could this happen if you both bid the same scope of services and what could that contractor do beyond the scope, the African American contractor said, "nothing."

In that same focus group, a second African American masonry contractor who bid multiple times on city, county, and school projects stated:

"I went to Edifice and quoted them a price because I knew what [name of a white competitor firm] his numbers were. So I dropped my number. They told me, 'Well, we got this gentleman, we're going to give him both of the schools.' I said 'Okay.' They turned around, this gentleman had so much work that he couldn't get to them to pour their concrete.

"Don't you know, I went on that job and asked them again, 'Well, can I come in now, since this man can't make it?' Instead of using my price, 36 cents a square foot, they called a company way out of Mooresville somewhere; they was white.

"They paid them 45 cents a square foot. They just disregarded [my numbers] ... in other words, they took my proposal and just put it in the trash can."

In a personal interview, an African American service firm cited an instance "where CMUD awarded us a vendor contract but I [his firm] was never called. I followed up and called the owner who told me that it would happen, but two years later it never got worked out. The staff told me that 'it fell through the cracks.' I was told I'd be blackballed if I was too aggressive."

In a personal interview, an African American hauling firm that has bid on multiple City and CMS projects cited three instances where his firm was the low bidder and didn't get all of the work. The prime attempted to "run us off the job." In one instance, the out-of-town prime asked the firm to drop their price because they found a lower price. That same prime gave some of the hauling to another firm since the MBE did not have the type of trucks needed at the moment. [NOTE: the hauler was to be informed of the type of material to be hauled such as dirt or broken concrete so that they could have the proper type truck available.] That prime also reneged on an agreement to pay weight tickets that resulted from the trucks being over weight because the prime contractor overloaded the trucks. The prime didn't want to pay the tickets. The time logs were incorrect since his trucks arrived at 7 AM but were logged in at 9 AM. The MBE protested the action and asked CMUD for a meeting to discuss their concerns. The MBE felt that the CMUD staff sided with the prime. They were told, "If the prime comes in complaining about you again, we're going to have to get rid of you." While the contract amount was \$280,000, \$80,000 went to another firm.

In response to a question if such actions are usual, he ended by saying that "We have got other jobs and looked up and the hauling was over with." When he asked the prime "I thought we were supposed to do this, I was told 'we forgot.' I might get something on the end."

A WBE professional service firm that worked on multiple city and county jobs cited two instances where she was "on the team," but didn't perform the work. On a city project she found out "far too late" that her team got the job. She was never called. She did not protest because she was lukewarm about the project and was very busy. She figured that if they didn't want her, she didn't want to work with them. On a different City job, a friend told her that the firm she was teamed with got the job. When she called

them to inquire about her scope of work, she was informed that "they forgot." She ended up doing some work, but they substantially reduced her scope and subsequent fee.

A nonminority male contractor stated that he was the low bidder on a CMS project when the bids were opened, but lost the bid when the alternatives were considered. He felt that he had been treated unfairly and that the owner favored another company over his.

A prime contractor who performs all of his work in the private sector stated that he suffered from reverse discrimination when his firm "was not selected for a job where an M/WBE was also being considered."

6.4.5 Perceptions of Business Attitudes, Business Practices, and M/WBEs

Survey participants (**Exhibit 6-13**) were asked to respond to a number of items regarding business attitudes and practices as they affected minority and nonminority businesses.

- More than half of M/WBEs and three-quarters of African Americans who responded agreed that there was an informal network of prime and subcontractors in the Charlotte area, compared with slightly fewer than half of nonminority male-owned firms that responded.
- Regardless of race, gender, or ethnicity, roughly half of all respondents did not know if this informal network excluded them from bidding or winning contracts, but one-third of all M/WBEs felt this network excluded them in public sector bidding and awards, compared with 15 percent of nonminority male-owned firms.
- A greater percentage of respondents felt that an informal network excluded them from bidding or winning a contract in the public sector than in the private sector.
- Although nearly half of all nonminority male-owned firms had agreed with the existence of the "informal network," their sense of exclusion because of it was much less than for M/WBEs, half of whom perceived a "greater adverse effect" of the network on M/WBEs. Three-quarters of African American respondents agreed with this statement compared with only 7 percent of respondents representing nonminority male-owned firms, two-thirds of whom said they had no opinion or did not know.

**EXHIBIT 6-13
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY RESPONSES
BUSINESS ATTITUDES AND PRACTICES BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER**

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Informal network of prime and subcontractors in Charlotte area</i>								
Strongly agree/agree	74%	63%	56%	36%	51%	59%	45%	n=509 52%
Disagree/strongly disagree	2%	5%	0%	0%	8%	5%	11%	8%
Neutral/do not know	24%	32%	44%	64%	41%	36%	44%	40%
<i>This network excluded company from bidding or winning a contract in Public sector</i>								
Strongly agree/agree	49%	39%	33%	0%	23%	33%	15%	n=504 24%
Disagree/strongly disagree	14%	17%	20%	22%	24%	20%	33%	26%
Neutral/do not know	37%	44%	47%	78%	53%	47%	52%	50%
<i>This network excluded company from bidding or winning a contract in Private sector</i>								
Strongly agree/agree	33%	31%	33%	0%	16%	23%	8%	n=486 15%
Disagree/strongly disagree	19%	19%	8%	25%	27%	23%	40%	32%
Neutral/do not know	48%	50%	58%	75%	57%	54%	52%	53%
<i>Informal network has greater adverse effect on M/WBE owned firms than on others.</i>								
Strongly agree/agree	74%	39%	54%	13%	34%	49%	7%	n=463 29%
Disagree/strongly disagree	2%	17%	8%	13%	13%	9%	31%	20%
Neutral/do not know	24%	44%	38%	75%	53%	42%	62%	52%
<i>MWBE firms are as capable as nonminority firms.</i>								
Strongly agree/agree	95%	96%	96%	90%	92%	94%	73%	n=737 84%
Disagree/strongly disagree	2%	0%	0%	0%	0%	1%	3%	2%
Neutral/do not know	2%	4%	4%	10%	8%	6%	24%	14%

EXHIBIT 6-13 (Continued)
CITY OF CHARLOTTE/MECKLENBURG COUNTY/CHARLOTTE-MECKLENBURG SCHOOLS
ON-LINE VENDOR SURVEY RESPONSES
BUSINESS ATTITUDES AND PRACTICES BY BUSINESS OWNER
RACE/ETHNICITY AND GENDER

QUESTION	African American	Hispanic American	Asian American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Double standards in bidding on contracts are applied to MWBE businesses in both public and private sectors</i>								
Strongly agree/agree	66%	41%	45%	20%	20%	40%	13%	n=554 27%
Disagree/strongly disagree	6%	27%	10%	20%	25%	17%	28%	22%
Neutral/do not know	28%	32%	45%	60%	55%	43%	58%	50%
<i>Double standards in qualifications/performance make it more difficult for MWBE businesses to win bids and contracts in the Charlotte area</i>								
Strongly agree/agree	69%	32%	39%	10%	15%	37%	4%	n=527 21%
Disagree/strongly disagree	4%	27%	6%	30%	25%	16%	40%	28%
Neutral/do not know	27%	41%	56%	60%	60%	47%	56%	51%
<i>Common practice for an M/WBE firm to be dropped by the prime after winning the contract</i>								
Strongly agree/agree	56%	32%	47%	11%	26%	38%	12%	n=477 26%
Disagree/strongly disagree	6%	18%	12%	11%	12%	10%	23%	16%
Neutral/do not know	39%	50%	41%	78%	62%	52%	65%	58%
<i>M/WBE firms are viewed as less competent than nonminority firms</i>								
Strongly agree/agree	79%	58%	64%	40%	32%	52%	16%	n=632 36%
Disagree/strongly disagree	5%	13%	9%	30%	32%	20%	37%	28%
Neutral/do not know	16%	29%	27%	30%	36%	28%	46%	37%
<i>Nonminority firms put forth an honest effort to include M/WBEs as subcontractors when bidding on projects</i>								
Strongly agree/agree	18%	21%	35%	33%	23%	22%	36%	n=556 29%
Disagree/strongly disagree	45%	38%	30%	22%	20%	31%	6%	20%
Neutral/do not know	37%	42%	35%	44%	56%	47%	58%	52%

- An overwhelming majority of M/WBE respondents (94%) agreed with the statement that M/WBEs “are as capable as nonminority firms,” compared with three-quarters of nonminority male-owned firm respondents.
- Forty percent of M/WBE respondents believed that M/WBEs were victimized in both the private and public sectors by “double standards,” compared with only 13 percent of nonminority male-owned firm respondents. Among M/WBEs, two-thirds of African American respondents agreed with this statement.
- Only 4 percent of nonminority male-owned firm respondents agreed that double standards hurt M/WBEs in bidding on and winning contracts in the Charlotte area, compared with more than one-third of M/WBE respondents and 69 percent of African American firm respondents.
- Most African American respondents (56%) agreed that it was a common practice for an M/WBE firm to be dropped by a prime after winning a contract, and although fewer than 10 percent of M/WBE respondents disagreed with this statement, half indicated they either did not know or had no opinion, as did nearly two-thirds of nonminority male-owned firm respondents.
- More than half of all M/WBE respondents and nearly 80 percent of African American respondents agreed with the statement that M/WBEs are viewed as less competent than nonminority firms. Fewer than one-sixth of all nonminority male-owned firm respondents agreed with this statement, and the remainder indicated either disagreement or no opinion.
- More than one-third of nonminority male-owned firm respondents agreed with the statement that nonminority firms put forth an honest effort to include M/WBEs when bidding on projects. However, only a fifth of all M/WBE respondents agreed, and nearly half of African American respondents disagreed.

During the personal interviews, a professional service firm answered yes to the question, “Do you think that the ability of small, minority or woman businesses to get certified gives them a competitive advantage?” He stated that he believed that they get additional exposure that his firm does not receive.

**7.0 PRIVATE SECTOR UTILIZATION
AND DISPARITY ANALYSES**

7.0 PRIVATE SECTOR UTILIZATION AND DISPARITY ANALYSES

This chapter analyzes the utilization and availability of minority, women, and nonminority firms in the private commercial (nonresidential) construction in the Charlotte relevant market. The results of the analyses are to determine whether minority, women, or nonminority businesses were underutilized or overutilized in private sector commercial construction.

This chapter consists of the following sections:

- 7.1 Methodology
- 7.2 Collection and Management of Data
- 7.3 Utilization Analysis
- 7.4 Availability Analysis
- 7.5 Disparity Analysis
- 7.6 Comparison of Charlotte and Private Sector Utilization of M/WBE Contractors
- 7.7 Conclusions

7.1 Methodology

This section presents the methodology for the collection of data and analysis of market areas, utilization, and availability of minority-, woman-, and nonminority-owned firms. The description of business categories and minority- and woman-owned business enterprise (M/WBE) classifications are also presented in this section, as well as the process used to determine the geographical market areas, utilization, and availability of firms.

7.1.1. Private Sector Analysis

Croson provided that the government “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by

the Fourteenth Amendment.”¹ The government agency's active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Finding discrimination in the portions of the private sector economy that are subjects of the disparity study can also show passive participation. In *Croson*, the Court stated, "A municipality has a compelling government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality's legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program.”² The recent Court of Appeals decision in *Adarand* concluded that there was a compelling interest for a DBE program based primarily on evidence of private sector discrimination.³

The goal of this section is to evaluate the presence or absence of passive discrimination in the private sector, and to determine if there is evidence to support anecdotal comments from Chapter 6.0 on difficulties M/WBEs have in securing work on private sector projects. Passive discrimination will be addressed through disparity analysis of the utilization by majority prime contractors of M/WBE construction subcontractors on non-City funded projects in the Charlotte MSA construction market. Whatever disparity analysis that is sufficient to establish a prima facie showing of discrimination in the context of public sector contracting should be sufficient when applied to private data to provide an estimate of the magnitude of private discrimination.⁴ These comparisons will assess the extent to which majority prime contractors hire M/WBE subcontractors only to satisfy public sector requirements. Thus the following questions are addressed:

¹ See *Richmond v. Croson*, 488 U.S. 492 (1989).

² *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

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

⁴ I. Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" 98 *Columbia Law Review* 1577 (1998).

- Are there disparities in utilization of M/WBEs as prime contractors on commercial private sector construction projects?
- Are there disparities in utilization of M/WBEs as subcontractors on the commercial private sector construction projects?
- Do M/WBE subcontractors that perform on City of Charlotte projects also perform on private sector jobs?
- How does the rate of M/WBE subcontractor utilization by prime contractors on City of Charlotte projects compare to the rate of such utilization on similar private sector projects?

7.2 Collection and Management of Data

To determine the most appropriate data for our use in the analysis of the Charlotte procurement activity and to identify data sources for the private sector construction analysis, MGT investigated three sources of data: Reed Construction Data (RCD) (formerly *Construction Management Data*), building permit data, and *F.W. Dodge*. This chapter reports results from building permits data because building permits was the most complete data source for the analysis. Data from RCD is included in **Appendix U**, and briefly summarized in this chapter. *F.W. Dodge* produces similar data on construction markets as RCD, but RCD was found to be more accessible and complete. Both the RCD data and *F.W. Dodge* data was limited in comparison to the building permit data, both in quantity and quality.

MGT contacted the Mecklenburg County Land Use and Environmental Service Agency to obtain building permit data for the City of Charlotte to use for comparison purposes. Appropriate permits are required for any building construction, alteration, or repair involving new or changed uses of property (other than ordinary repairs). A single permit is issued for all work on new one and two family dwellings. Separate permits are required for building, electrical, heating, air conditioning and plumbing work on all other

types of buildings. EXCEPTION: Permits shall not be required for any work costing five thousand dollars or less, unless the work involves:

- The addition, repair, or replacement of load bearing structures;
- The addition or change in the design of a plumbing system;
- The addition, replacement or change in the design of a heating or air conditioning system;
- The addition, replacement or change in the design of an electrical system;
- The use of materials not permitted by the code;

The object of this analysis was to compare the City of Charlotte's construction contracting to that of the private sector contracting practices.

The data fields that were provided to MGT are as follows:

- Prime permit number
- Subcontractor permit number
- Contractor Name
- Contractor Number
- Contractor Address—City, State, and ZIP
- Project Descriptions
- Job work category
- Permit Cost
- Indicator of prime or subcontractor

MGT received the data in a text file format and imported the data into an Access database for purposes of analyses. The data were then categorized to eliminate records dealing with public sector and residential building permits. The analyses were done solely on commercial construction projects. Since there was no contractor ethnicity information available in the building permit data, MGT compared the names of the firms from the Master Vendor Database (the methodology used for the Master Vendor Database was previously explained in Section 4.1.3) to find as many ethnicities as possible. Both electronic and manual matches were completed to find ethnicity information for the building permit data.

There were a total of 77,387 construction prime records to be used for analyses, totaling \$4.5 billion in building permits. For construction subcontractors, there were a total of 43,768 records totaling \$1.45 billion in building permits. The data were classified as prime and subcontractor by the staff maintaining the database. The building permit data reported in this chapter covered the period from January 1, 1998, to December 31, 2002.

7.2.2 Availability (Vendor) Data Collection

MGT also calculated M/WBE availability in the Charlotte MSA using census data. These availability estimates, the methodology on which they are based, and disparity tables based on these estimates, are contained in **Appendix I**.

7.2.3 Market Area Methodology

The analysis of the private sector was conducted for Mecklenburg County.

7.2.4 Business Categories and M/WBE Classifications

This chapter studies only construction, the area for which there is the most extensive data on private sector activity and the locus of the most controversy in socioeconomic procurement preference programs. M/WBE classification is the same as for the analysis in Chapter 4.0.

7.3 Utilization Analysis

This section presents the utilization of M/WBE and non-M/WBE firms for construction services for Charlotte within the relevant market area.

7.3.1 Prime Contracts

Exhibit 7-1 shows the utilization of prime contractors. As the exhibit shows, there were \$4.5 billion in prime commercial construction contracts in the five years of the study

within the relevant market area. The average permit size was \$58,425. Of the total dollars spent, minority and women-owned firms combined received approximately 6.97 percent (\$315 million) in prime commercial construction building permits. However, minority-owned firms alone received only 0.16% (\$7.3 million) of the total \$315 million in prime commercial building permits issued to M/WBE firms. WBEs received \$308 million (or approximately 98% of the M/WBE total) in prime commercial building permits. The average prime building permit received by an M/WBE was \$177,796. In the data from Reed Construction, WBEs had 0.99 percent of private sector prime commercial construction building permits, but MBEs won no prime private contracts in the private sector (**Appendix U, Exhibit U-1**). In the RCD data the average prime project was \$275,283.

Additional findings from the building permit data include:

- African American firms' overall prime contract utilization in commercial construction during the study period was 0.08 percent.
- Hispanic American firms' overall prime contract utilization in commercial construction during the study period was 0.02 percent.
- Asian American firms' overall prime contract utilization in commercial construction during the study period was 0.06 percent.
- Native American firms' overall prime contract utilization in commercial construction during the study period was 0.0 percent.
- Nonminority women firms' overall prime contract utilization in commercial construction during the study period was 6.81 percent.

Exhibit 7-2 provides data on private commercial M/WBE prime contractor utilization by the number of building permits and number of unique vendors in the Charlotte MSA from 1998 to 2002 in the building permits data. In the building permits data, 69 M/WBE firms received 1,773 total prime contract building permits, 2.29 percent of the total. Of the M/WBE groups, 34 nonminority women firms received the largest number of prime building permits at 1,220, or 1.58 percent. In the Reed Construction

**EXHIBIT 7-1
CITY OF CHARLOTTE
BUILDING PERMIT DATA
UTILIZATION ANALYSIS OF PRIME CONTRACTORS
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS
BY RACE/ETHNICITY/GENDER CLASSIFICATION**

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
1998-2002	\$3,637,402.00	0.08%	\$825,048.00	0.02%	\$2,884,856.00	0.06%	\$0.00	0.00%	\$307,886,325.00	6.81%	\$315,233,631.00	6.97%	\$4,206,149,342.00	93.03%	\$4,521,382,973.00
Total	\$3,637,402.00	0.08%	\$825,048.00	0.02%	\$2,884,856.00	0.06%	\$0.00	0.00%	\$307,886,325.00	6.81%	\$315,233,631.00	6.97%	\$4,206,149,342.00	93.03%	\$4,521,382,973.00

Sources: Building Permit data from Mecklenburg County.

¹ Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 7-2
CITY OF CHARLOTTE
BUILDING PERMIT DATA
UTILIZATION ANALYSIS OF BUILDING PERMITS
NUMBER OF BUILDING PERMITS AND UNIQUE CONTRACTORS**

Number of Permits Issued by Race/Ethnicity/Gender Classification

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Permits
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998-2002	423	0.55%	23	0.03%	107	0.14%	0	0.00%	1,220	1.58%	1,773	2.29%	75,614	97.71%	77,387

Number of Vendors by Race/Ethnicity/Gender Classification

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	
1998-2002	25	0.49%	4	0.08%	6	0.12%	0	0.00%	34	0.67%	69	1.36%	5,019	98.64%	5,088

Source: Building Permit data from Mecklenburg County.

¹ Percentage of Total Permits

¹ Percentage of Total Vendors.

data, WBEs won 4.1 percent of private commercial prime building permits (**Appendix U, Exhibit U-2**).

Other findings include:

- Twenty-five African American firms received 423 prime private sector commercial building permits.
- Four Hispanic American firms received 23 prime private sector commercial contracts.
- Six Asian American firms received 107 prime private sector commercial contracts.
- Native American firms did not receive any private sector commercial contracts.

7.3.2 Subcontracts

The utilization of M/WBE and non-M/WBE subcontractors is displayed in **Exhibit 7-3**. The exhibit shows \$1.45 billion in subcontracting building permits as well as dollars earned by the prime contractors who have subcontracting activity. The average subcontractor building permit was valued at \$33,145. Overall, M/WBE firms received \$20.7 million in private sector commercial subcontracts over the study period, 1.43 percent of the total. MBEs received \$7.3 million (0.51%) in private sector commercial subcontracts and nonminority women received .92 percent. The average M/WBE subcontractor building permit was valued at \$28,931.

Additional findings include:

- African American firms received \$6.6 million in construction subcontract building permits, or 0.46 percent of the total commercial construction subcontract dollars.
- Hispanic American received no commercial construction subcontracting building permits.
- Asian American firms received about \$674,000 in commercial construction subcontracting building permits, or 0.05 percent of the total.

**EXHIBIT 7-3
CITY OF CHARLOTTE
BUILDING PERMIT DATA
UTILIZATION ANALYSIS OF SUBCONTRACTORS
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS
BY RACE/ETHNICITY/GENDER CLASSIFICATION**

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Dollars Awarded
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	
1998-2002	\$6,627,982.00	0.46%	\$0.00	0.00%	\$674,082.00	0.05%	\$30,002.00	0.00%	\$13,383,201.00	0.92%	\$20,715,267.00	1.43%	\$1,430,008,894.00	98.57%	\$1,450,724,161.00
Total	\$6,627,982.00	0.46%	\$0.00	0.00%	\$674,082.00	0.05%	\$30,002.00	0.00%	\$13,383,201.00	0.92%	\$20,715,267.00	1.43%	\$1,430,008,894.00	98.57%	\$1,450,724,161.00

Source: Building Permit data from Mecklenburg County.

¹ Percentage of total dollars awarded annually to prime contractors.

- Native American firms received about \$30,000 in commercial construction subcontracting building permits, a negligible percentage of the total.
- Women firms received about \$13.3 million in commercial construction subcontracting building permits, or 0.92 percent of the total.
- Nonminority male-owned firms received 98.5 percent of all commercial construction subcontracting building permits.

Exhibit 7-4 provides data on private commercial M/WBE subcontractor utilization by the number of building permits and the number of unique vendors in the Charlotte relevant market in the building permits data. In the building permits data, 28 M/WBE firms received 716 total building permits for commercial subcontracting work, 1.64 percent of the total. Findings include:

- Fourteen African American firms received 277 private sector building permits for commercial subcontracting work.
- Hispanic American firms received no private sector building permits for commercial subcontracting work.
- One Asian American firm received 49 private sector building permits for commercial subcontracting work.
- One Native American firm received four private sector building permits for commercial subcontracting work.
- Twelve Nonminority Women firms received 386 private sector building permits for commercial subcontracting work.
- Two Thousand one hundred and fifty two nonminority male-owned firms received 98.36 percent of all commercial construction subcontracting building permits.

Exhibit 7-5 presents a summary of the subcontractor data based on **Exhibits 7-3 and 7-4**. This exhibit also shows the average subcontract value, M/WBE's average subcontract value was less than nonminority males (\$28,951.94 compared to \$33,215.85). The average subcontract for nonminority women (\$34,671.51) was higher than any MBE category.

**EXHIBIT 7-4
CITY OF CHARLOTTE
BUILDING PERMIT DATA
UTILIZATION ANALYSIS OF SUBCONTRACTORS
NUMBER OF PERMITS AND UNIQUE CONTRACTORS**

Number of Permits Issued by Race/Ethnicity/Gender Classification

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Permits
	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	#	% ¹	
1998-2002	277	0.63%	0	0.00%	49	0.11%	4	0.01%	386	0.88%	716	1.64%	43,052	98.36%	43,768

Number of Vendors by Race/Ethnicity/Gender Classification

Total Dollars	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total Vendors
	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	#	% ²	
1998-2002	14	0.64%	0	0.00%	1	0.05%	1	0.05%	12	0.55%	28	1.28%	2,152	98.72%	2,180

Source: Building Permit data from Mecklenburg County.

¹ Percentage of Total Permits

¹ Percentage of Total Vendors.

**EXHIBIT 7-5
CITY OF CHARLOTTE
BUILDING PERMIT DATA
SUMMARY OF UTILIZATION ANALYSIS OF SUBCONTRACTORS
BY RACE/ETHNICITY/GENDER CLASSIFICATION**

	African Americans		Hispanic Americans		Asian Americans		Native Americans		Nonminority Women		M/WBE Subtotal		Nonminority Firms		Total
	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$	% ¹	\$
# of Subcontractors	14	0.64%	0	0.00%	1	0.05%	1	0.05%	12	0.55%	28	1.28%	2,152	98.72%	2,180
# of Subcontracts	277	0.63%	0	0.00%	49	0.11%	4.0	0.01%	386	0.88%	716	1.64%	43,052	98.36%	43,768
Total Sub \$	\$6,627,982.00	0.46%	\$0.00	0.00%	\$674,082.00	0.05%	\$30,002.00	0.00%	\$13,383,201.00	0.92%	\$20,715,267.00	1.43%	\$1,430,008,894.00	98.57%	\$1,450,724,161.00
Average Subcontract \$ Value	\$23,927.73		N/A	N/A	\$13,756.78		\$7,500.50		\$34,671.51		\$28,931.94		\$33,215.85		\$33,145.77

Source: Building Permit data from Mecklenburg County
¹ Percent of total dollars awarded annually to prime contractors.

7.4 Availability Analysis

This section discusses the availability of both prime and subcontractors, according to race/ethnicity/gender categories. The availability of M/WBE and non-M/WBE firms was determined from census data. **Exhibits 7-6** and **7-7** display availability statistics for prime contractors and subcontractors.

7.4.1 Construction Prime Contractor Vendor Availability

As **Exhibit 7-6** shows, nonminority male-owned firms comprised the majority of available prime contractor construction firms, according to the combined vendor data. M/WBEs constituted about 10.69 percent of the prime contractor vendor data. Among the M/WBE groups, the breakdown was:

- African American firms, 2.33 percent;
- Hispanic American firms, 1.19 percent;
- Asian American firms, 0.25 percent;
- Native American firms, 0.25 percent; and
- Nonminority women firms, 6.67 percent.

7.4.2 Construction Subcontractor Vendor Availability

Similarly, nonminority male-owned firms comprised the majority of available subcontractor construction firms (82.81%), according to the combined vendor data (**Exhibit 7-7**). Among the M/WBE groups, the breakdown of the 17.19 percent M/WBE availability was:

- African American firms, 4.45 percent;
- Hispanic American firms, 2.41 percent;
- Asian American firms, 0.68 percent
- Native American firms, 1.51 percent; and
- Nonminority women firms, 8.14.

7.5 Disparity Analysis

Disparity is determined by comparing the percentage of utilization to the percentage of availability. Once compared, a disparity index was established that indicates if M/WBEs were underutilized or overutilized.

**EXHIBIT 7-6
CHARLOTTE MSA PRIVATE SECTOR CONSTRUCTION
AVAILABILITY OF CENSUS CONTRACTORS
BASED ON VENDOR DATA
CALENDAR YEARS 1998 THROUGH 2002**

Total Dollars	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women ²		M/WBE Subtotal		Nonminority Firms ³		Total Firms ⁴
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
1998-2002	74	2.33%	38	1.19%	8	0.25%	8	0.25%	212	6.67%	340	10.69%	2,840	89.31%	3,180

Source of Data: U.S. Bureau of the Census, 1997

NOTE: Details may not add to Total Firms due to rounding.

¹ Minority men and women firms are included in their respective minority classifications.

² The number of nonminority women firms was estimated by subtracting the number of minority women-owned firms from the census count of total women-owned firms.

³ Number of nonminority firms derived by subtracting all M/W/DBE firms from total firms.

⁴ Total firms derived from the U.S. Bureau of Census and County Business Patterns.

**EXHIBIT 7-7
 CHARLOTTE MSA PRIVATE SECTOR CONSTRUCTION
 AVAILABILITY OF SUBCONTRACTORS
 BASED ON CENSUS DATA
 CALENDAR YEARS 1998 THROUGH 2002**

Total Dollars	African Americans ¹		Hispanic Americans ¹		Asian Americans ¹		Native Americans ¹		Nonminority Women ²		M/WBE Subtotal		Nonminority Firms ³		Total Firms ⁴
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
1998-2002	626	4.45%	338	2.41%	96	0.68%	212	1.51%	1,144	8.14%	2,416	17.19%	11,638	82.81%	14,054

Source of Data: U.S. Bureau of the Census, 1997

NOTE: Details may not add to Total Firms due to rounding.

¹ Minority men and women firms are included in their respective minority classifications.

² The number of nonminority women firms was estimated by subtracting the number of minority women-owned firms from the census count of total women-owned firms.

³ Number of nonminority firms derived by subtracting all M/W/DBE firms from total firms.

⁴ Total firms derived from the U.S. Bureau of Census and County Business Patterns.

7.5.1 Prime Contracts

Exhibit 7-8 shows the disparity indices for prime construction contracts, based on census availability. Overall, according to the disparity indices, all MBE groups were substantially underutilized in the private sector prime contractor commercial construction in the Charlotte relevant market. Nonminority women and nonminority owned firms were overutilized. Moreover:

- African American firms were substantially underutilized as prime contractors in the study, with a disparity index of 3.46.
- Hispanic American firms were substantially underutilized as prime contractors, with a disparity index of 1.53.
- Asian American firms were substantially underutilized as prime contractors, with a disparity index of 25.36.
- Native American firms were underutilized, with a disparity index of 0.0.
- Nonminority women firms were overutilized, with a disparity index of 102.14.
- Nonminority male firms were overutilized, having a 104.17 disparity index.

**EXHIBIT 7-8
CHARLOTTE MSA PRIVATE SECTOR CONSTRUCTION
DISPARITY ANALYSIS OF PRIME CONTRACTORS
BASED ON CENSUS DATA
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of Contract Dollars ¹	% of Available Firms ²	Disparity Index ³	Disparate Impact of Utilization
All Calendar Years				
African Americans	0.08%	2.33%	3.46	* Underutilization
Hispanic Americans	0.02%	1.19%	1.53	* Underutilization
Asian Americans	0.06%	0.25%	25.36	* Underutilization
Native Americans	0.00%	0.25%	0.00	* Underutilization
Nonminority Women	6.81%	6.67%	102.14	Overutilization
Nonminority Firms	93.03%	89.31%	104.17	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown.

² The percentage of available contractors is taken from the availability exhibit previously shown.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

7.5.2 Subcontracts

Exhibit 7-9 shows the disparity indices for subcontracts, based on vendor availability. As the exhibit illustrates, all M/WBE categories were substantially underutilized for the overall study period. The overall disparity indices were:

- African American firms were substantially underutilized as subcontractors in the study, with a disparity index of 10.26.
- Hispanic American firms were substantially underutilized as subcontractors, with a disparity index of 0.00.
- Asian American firms were substantially underutilized as subcontractors, with a disparity index of 6.80
- Native American firms were also substantially underutilized as subcontractors, with a disparity index of 0.14.
- Nonminority women firms were substantially underutilized as subcontractors, with a disparity index of 11.33.
- Nonminority male firms were overutilized as subcontractors. The 119.04 disparity index for non-M/WBEs indicates that they were substantially overutilized.

**EXHIBIT 7-9
CHARLOTTE MSA PRIVATE SECTOR CONSTRUCTION
DISPARITY ANALYSIS OF SUB CONTRACTORS
BASED ON CENSUS DATA
WITH OR WITHOUT DOLLAR AMOUNTS IN CMD
CALENDAR YEARS 1998 THROUGH 2002**

M/WBE Classification	% of Subcontract Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
All Calendar Years				
African Americans	0.46%	4.45%	10.26	* Underutilization
Hispanic Americans	0.00%	2.41%	0.00	* Underutilization
Asian Americans	0.05%	0.68%	6.80	* Underutilization
Native Americans	0.00%	1.51%	0.14	* Underutilization
Nonminority Women	0.92%	8.14%	11.33	* Underutilization
Nonminority Firms	98.57%	82.81%	119.04	Overutilization

¹ The percentage of dollars is taken from the prime utilization exhibit previously shown.

² The percentage of available contractors is taken from the availability exhibit previously shown.

³ The disparity index is the ratio of % utilization to % availability times 100.

* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

7.6 Comparison of Charlotte and Private Sector Utilization of M/WBE Contractors

There are also significant differences in utilization of M/WBE subcontractors between the City of Charlotte and the construction contracts in the building permits database. The City of Charlotte used 179 M/WBE subcontractors whereas the private sector used only 28 M/WBE subcontractors (**Exhibits 7-3 and 7-4**). MGT found one M/WBE subcontractor used by the City that was used in the private sector commercial construction market. The average M/WBE subcontract amount for City of Charlotte projects was \$44,919 while the average M/WBE subcontract using the building permit data was about half that at \$28,931. Non-M/WBE shows a similar trend with subcontractor data with the average City of Charlotte project at \$38,199 and the building permit data at \$33,215. The median subcontract amount on City of Charlotte projects was \$10,640, twice that of building permit subcontracts (\$5,000). M/WBE's median subcontract amount for building permit subcontracts (\$8,350) was higher than the overall median (\$5,000). There were 23 nonminority primes that were utilized by both building permit data the city. Thirteen of these primes utilized M/WBE subcontractors on City projects and none used M/WBE subcontractors on private sector projects.

Similarly, the City of Charlotte utilized 54 M/WBE prime contractors (**Exhibit 4-11**) on \$1.1 billion in spending with prime contractors versus 69 M/WBEs in the private sector on \$4.5 billion in spending with prime contractors (**Exhibits 7-1 and 7-2**). There were five M/WBE and 23 nonminority prime contractors that were utilized in both building permit data and by the City. Based on building permit data, the overall median prime contract for all contractors was \$10,000. The overall median prime contract on City of Charlotte contracts was considerably higher \$245,732. There was little difference between the median for M/WBEs compared to overall prime contracts for both building permit data and City of Charlotte data.

7.7 Conclusions

Exhibit 7-10 provides a summary of the utilization of M/WBEs in private commercial construction in the Charlotte relevant market in comparison with M/WBE utilization by the City of Charlotte. M/WBE utilization was substantially lower in the private sector commercial construction market than by the City. Moreover, the City used many more M/WBEs, particularly in proportion to its spending, than did the private sector commercial construction market. Capacity alone is not a sufficient explanation for these differences at the subcontractor level where capacity is a less significant factor. There was not a substantial difference between the average building permit on subcontracts between M/WBEs and non-M/WBEs. A number of M/WBEs also demonstrated capacity to handle subcontracts greater than \$100,000 (**Appendix H**). This evidence is consistent with anecdotal comments from M/WBEs (Chapter 6.0) that utilization of M/WBEs as primes by owners, or as subcontractors by primes will be substantially below reasonable measures of M/WBE availability in the absence of M/WBE program goals.

**EXHIBIT 7-10
COMPARISON OF M/WBE UTILIZATION PERCENTAGE OF DOLLARS
PRIVATE COMMERCIAL CONSTRUCTION
AND CHARLOTTE
CALENDAR YEARS 1998 THROUGH 2002**

Business Category/Data Source	African American	Hispanic American	Asian American	Native American	Nonminority Women	M/WBEs	Nonminority Firms
Prime Contractors							
Charlotte Construction Prime Contractors	3.32%	0.04%	4.47%	0.28%	6.65%	14.77%	85.23%
Private Construction Prime Contractors (Building Permits)	0.08%	0.02%	0.06%	0.00%	6.81%	6.97%	93.03%
Private Construction Prime Contractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.99%	0.99%	99.01%
Subcontractors							
Charlotte Construction Subcontractors*	2.33%	0.38%	0.04%	0.17%	3.38%	6.30%	87.40%
Private Construction Subcontractors (Building Permits)	0.46%	0.00%	0.05%	0.00%	0.92%	1.43%	98.57%
Private Construction Subcontractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

Source: Chapter 4 Analysis Results
*Based on 30% subcontractor utilization

8.0 FINDINGS AND RECOMMENDATIONS

8.0 FINDINGS AND RECOMMENDATIONS

This chapter presents a synopsis of the findings and recommendations resulting from the disparity study conducted for the City of Charlotte. Through a competitive bid process, the City of Charlotte contracted with MGT of America, Inc. (MGT) to conduct a detailed, comprehensive disparity study. As a leader in the field, MGT has been careful to always remain cognizant of the applicable case law in this evolving area of jurisprudence. As such, the overriding concern of MGT during this study was strict adherence to the specific dictates the courts have required where racial, ethnic, or gender preferences are used by local governments in their decisionmaking process. As detailed in Chapter 2.0 of our study, in the *Croson* decision the United States Supreme Court extended strict judicial scrutiny to state and local affirmative action programs that use racial or ethnic criteria as a basis for decisionmaking. This standard therefore applies to the preference programs formerly utilized by the City of Charlotte. An intermediate level of scrutiny applies to programs that use gender criteria as a basis for decisionmaking; this standard also applies to programs formerly utilized by the City.

More important for the purposes of our study, the courts have also indicated that for a race-based or gender-based preference program to be maintained there must be a clear evidentiary foundation established for the continuation of the programs. Generally, this evidence should also have been reviewed as part of the implementing agency's decisionmaking process in order for it to be relevant in any subsequent legal action. Thus, MGT presents our summary, findings, and recommendations to the City of Charlotte for your deliberative review and discussion.

8.1 Objective and Design of the Study

8.1.1 Framework for the Research

The principal objective of this study was to determine the amount of minority and nonminority woman business participation that exists in the procurement of construction, services, and goods and supplies, and to determine if the evidence supports affirmative action under the applicable legal standards. First and foremost, our study sought to address the following issue:

- Is there a disparity between (a) the number of M/WBE firms that are qualified to perform contracts with the City of Charlotte, and (b) the utilization by the City of Charlotte of these firms in contracting and procurement?

If—and only if—a disparity is found, MGT then moves forward to ascertain from the accumulated data the following issues:

- Is any such disparity the product of past racial, ethnic, or gender discrimination or is the apparent discrimination attributable to other race-neutral factors?
- Based on the nature and extent of the discrimination, can such disparity be ameliorated through nonracial, nonethnic, or nongender criteria available to all vendors?
- If it is determined that the appropriate remedy involves the utilization of racial, ethnic, or gender criteria in decisionmaking, how should the program be structured to remedy the effects of past discrimination while staying within constitutional guidelines?

Four major requirements set forth in the *Croson* decision guided the study.

- **Strict Scrutiny.** A majority of the Justices on the Supreme Court agreed that MBE plans that rely on race-based remedies are subject to a strict scrutiny standard of review. Thus, the basis for an MBE plan and the proposed remedies must be factual, and the link between its scope and that factual basis must be demonstrated.
- **Discrimination particularly linked to the market area of the implementing agency.** The City of Richmond attempted to rely on general findings of societal discrimination to support the need for its affirmative action plan. The Court did not accept this evidence. The Court required specific proof of the nature and extent of the discrimination against minority-owned businesses within Richmond's

local market area to support imposition of a local race-based remedy. *The required study must evaluate who is or has been available to perform government contracts, who is and was selected to do the work, and the disparity between the two.*

- **Race-neutral remedies.** In *Croson* the Court required that the enacting governmental organization evaluate nonracial solutions before it may adopt a more stringent measure such as a set-aside plan based on race.
- **Carefully tailored plan not of infinite duration.** Based on this standard of review, the plan must be carefully tailored to remedy the effects of past discrimination in the governmental organization's jurisdiction and must be in place only for the amount of time required to reverse the effects of such discrimination.

Within the context of the above requirements, MGT designed its study to meet the following conditions:

- an in-depth review of the City of Charlotte's contracting, purchasing, and M/WBE policies, procedures, and practices;
- a qualitative analysis of evidence as to whether there exists a history or pattern of behavior demonstrating that the City of Charlotte has declined or refused to award contracts, subcontracts, or purchases of goods and services to minorities or women that cannot be explained by any nonracial or nongender factors;
- a review of the City of Charlotte's contracting and purchasing records and contract files;
- specific identification of firms by name, address, and types of services that are ready, willing, and able to conduct business with the City of Charlotte;
- personal interviews with City staff, M/WBEs, prime contractors, business leaders, and selected key information sources presently and previously involved with the City of Charlotte;
- identification of specific problems that affect both minority-owned and nonminority women-owned business enterprises and other firms in their attempts to obtain City contracts, subcontracts, and purchase orders;
- a review of bidder, vendor, and census measures of availability where available;
- a presentation of various factors that may account for disparity, if any, including taking into consideration:

- analysis of the data into more narrow procurement categories (for example, decomposing construction into buildings, heavy construction and specialty trades)
 - bidding statutes and requirements;
 - contract size; and
 - measures of firm capacity and experience.
- identification of those race- and gender-neutral remedies for each identified problem; and
 - identification of narrowly tailored race- and gender-specific remedies to correct specific problems.

The City first established an MWBD program in 1981. The 1981 MWBD program allowed for the rejection of bids where goals were not met and there was no showing by the bidder of reasonable efforts to meet the MWBE goal. The City temporarily suspended the MWBD program in March 1982 based on the North Carolina attorney general opinion that the Charlotte MWBD program violated State public bidding laws. In October 1983 the City adopted a Good Faith Efforts plan and relied on evidence from a 1983 study M/WBE participation in City contracting produced by the Urban Institute. In 1987 the North Carolina General Assembly ratified another bill allowing Charlotte to establish an MWBD program.¹ The November 1987 plan required bidders to make good faith efforts prior to the bid. Contract-specific utilization goals were adopted. The statute did not provide for bid preferences or set-asides. Contractors were not required to subcontract work.

In 1991, the MWBD program was modified following the *Croson* decision. Certain minorities were excluded from the program based on results from the 1983 Urban Institute study. Charlotte, along with the County and Charlotte Mecklenburg Schools conducted a disparity study in 1993.² The 1993 disparity study generally found disparity for construction, professional services, and goods and services for all MWBD groups.³

¹ Senate Bill 290, Chapter 344 June 1987.

² D.J. Miller & Associates, *City of Charlotte MWBD Disparity Study*, October 1993.

³ Disparity for Asian owned firms was not always statistically significant.

The Charlotte MWBD program was ended in early 2002 as part of the settlement of a lawsuit filed by United Construction Company of Charlotte (“United”). United, a former certified M/WBE, was denied a contract for a City road project in Charlotte for failure to comply with the MWBD program good faith efforts requirements. The City awarded the \$2.5 million contract to another bidder that satisfied M/WBE good faith effort requirements by awarding a subcontract to M/WBEs. The MWBD program had been scheduled to sunset on December 31, 2002.

The study period included four years (1998 – 2001) in which the MWBD program was in place and one year (2002) after suspension of the program.

8.1.2 Framework for the Recommendations

The starting point for the recommendations is the court order in the case of *United Construction Company v. City of Charlotte*. The court order in *United Construction* required the City of Charlotte to conduct a race- and gender-neutral procurement program first if the City sought to remedy M/WBE underutilization. Consequently, Charlotte cannot institute a race-conscious M/WBE program before assessing the success of race-neutral efforts conducted by the City following suspension of the MWBD program. These race-neutral efforts included: business loans, enterprise loans, small business outreach activities (including a newsletter to notify numerous firms of City contracting opportunities and conducting and participating in business fairs), conducting workshops on how to do business with the City, pre-bid conferences, bond waivers, maintaining a referral system, and participating in the Small Business Information Center, as well as the Small Business Opportunity (SBO) program established in 2003.

Recommendations for any future M/WBE program are based on recent court rulings elaborating on features of a narrowly tailored program. The federal Disadvantaged Business Enterprise (DBE) program has been upheld by the courts as

being narrowly tailored.⁴ The federal DBE program has the following features in **Exhibit 8-1** that contribute to this characterization as being a narrowly tailored remedial procurement preference program. Charlotte should consider the adoption of these principles in any future procurement program with race- and/or gender-conscious features.

**EXHIBIT 8-1
NARROWLY TAILORED M/WBE/DBE PROGRAM FEATURES**

Narrowly Tailored Goal-Setting Features	DBE Regulations
The City of Charlotte should not use quotas.	49 CFR 26(43)(a)
The City of Charlotte should use race- or gender-conscious set-asides only in cases where other methods are inadequate to address the disparity.	49 CFR 26(43)(b)
The City of Charlotte should meet the maximum amount of its M/WBE goals through race-neutral means.	49 CFR 26(51)(a)
The City of Charlotte should use M/WBE contract goals only where race-neutral means are not sufficient.	49 CFR 26(51)(d)
The City of Charlotte should use M/WBE goals only where there are subcontracting possibilities.	49 CFR 26(51)(e)(1)
If the City of Charlotte estimates that it can meet the entire M/WBE goal with race-neutral means, then Charlotte should not use contract goals.	49 CFR 26(51)(f)(1)
If it is determined that the City of Charlotte is exceeding its goal, then Charlotte should reduce the use of M/WBE contract goals.	49 CFR 26(51)(f)(2)
If the City of Charlotte exceeds goals with race-neutral means for two years, then Charlotte should not set contract goals the next year.	49 CFR 26(51)(f)(3)
If the City of Charlotte exceeds M/WBE goals with contract goals for two years, then Charlotte should reduce use of contract goals the next year.	49 CFR 26(51)(f)(4)
If the City of Charlotte uses M/WBE goals, then Charlotte should award only to firms that made good faith efforts.	49 CFR 26(53)(a)
The City of Charlotte should give bidders an opportunity to cure defects in good faith efforts.	49 CFR 26(53)(d)

The rest of this chapter presents findings and recommendations. The findings and recommendations are broken into prime contractor and subcontractor findings and

⁴ *Adarand v. Slater*, 228 F.3d 1147 (10th Cir 2000); *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002); *Sherbrooke Turf v. Minnesota*, 2001 U.S. Dist. LEXIS 19565 (D Minn 2001); *Western States Paving v. Washington DOT*, Case No. C00-5204-RBL (WA 2003).

recommendations. Findings are separated into statistical and anecdotal findings. The statistical findings are based on data within the relevant market.⁵ Recommendations are organized into proposals for prime contracting, subcontracting, business development, and the Small Business Opportunity program office.

8.2 Statistical Analyses Findings – Prime Contracting

The following subsection presents findings and recommendations based on the review presented in Chapters 4.0, 5.0, and 7.0.

8.2.1 Data on Prime Contractor Spending

FINDING 8-1: Disparity in Prime Contracting for Construction

Prime contracts in construction were divided into those above and below \$30,000. Licensing requirements for performing contracts above \$30,000 results in different estimates of availability. Disparity analysis using bidder and vendor estimates of availability are presented for contracts above \$30,000.

Substantial disparity exists for the following underutilized groups in the Charlotte business categories (**see Exhibit 8-2**):

- Construction less than \$30,000: Prime Contracts – African American, Hispanic American, and Native American.
- Construction greater than \$30,000 (vendor availability): Prime Contracts – Hispanic American and Native American.
- Construction greater than \$30,000 (bidder availability): Prime Contracts – African American, Hispanic American, Native American, and nonminority women

⁵ The relevant market is the area where 75 percent of its total contracts were located. The actual counties making up the relevant market for each procurement category are listed in Chapter 4.0.

**EXHIBIT 8-2
CHARLOTTE CONSTRUCTION
SUMMARY OF DISPARITY ANALYSIS FOR
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Business Category by M/WBE Classification	% of Dollars ¹	% of Available Firms ²	Disparity Index ³	Disparate Impact of Utilization	Significance of Proportions ⁴
Construction Prime Contractors Less Than \$30,000					
African Americans	6.24%	8.55%	73.01	* Underutilization	-4.38 *
Hispanic Americans	0.64%	1.74%	36.55	* Underutilization	-6.38 *
Asian Americans	1.17%	0.82%	142.93	Overutilization	1.50
Native Americans	0.14%	0.61%	22.37	* Underutilization	-5.87 *
Nonminority Women	10.46%	7.19%	145.38	Overutilization	4.90 *
Nonminority Firms	81.36%	81.09%	100.33	Overutilization	0.32
Construction Prime Contractors Greater Than \$30,000 Vendor Availability					
African Americans	3.32%	0.95%	349.36	Overutilization	8.60 *
Hispanic Americans	0.04%	0.34%	11.98	* Underutilization	-9.60 *
Asian Americans	4.47%	0.62%	727.03	Overutilization	12.13 *
Native Americans	0.28%	0.40%	69.67	* Underutilization	-1.50
Nonminority Women	6.65%	2.76%	241.32	Overutilization	10.16 *
Nonminority Firms	85.23%	94.94%	89.78	Underutilization	-17.78 *
Construction Prime Contractors Greater Than \$30,000 Bidder Availability					
African Americans	3.32%	7.43%	44.71	* Underutilization	7.02 *
Hispanic Americans	0.04%	0.00%	0.00	* Underutilization	0.76
Asian Americans	4.47%	2.03%	220.63	Overutilization	8.20 *
Native Americans	0.28%	0.68%	41.47	* Underutilization	-2.01 *
Nonminority Women	6.65%	8.78%	75.72	* Underutilization	10.11 *
Nonminority Firms	85.23%	81.08%	105.12	Overutilization	91.01 *

* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

¹ The percentage of construction related contract dollars awarded to firms within the relevant market area.

² The percentage of available firms in the relevant market area.

³ The disparity index is the ratio of % utilization to % availability times 100.

⁴ The significance of proportions test examines if there is a statistical difference between utilization and availability. The test statistics are computed by taking the difference between utilization and availability and dividing by the square root of availability, times one minus availability divided by the available firms. If the test statistics are greater than two, overutilization is assumed. Conversely, if the test statistics are less than -2, underutilization is assumed.

FINDING 8-2: Disparity in Prime Contracting for Goods and Services

Substantial disparity exists for the following underutilized groups in the goods and services business categories (see Exhibit 8-3):

- Architecture and Engineering Prime Contracts – African American, Hispanic American, Asian American, and nonminority women.
- Professional Services: Prime Contracts – African American and Hispanic American.
- Other Services – African American.
- Goods and Supplies – African American, Hispanic American, Native American, and nonminority women.

**EXHIBIT 8-3
CHARLOTTE CONSTRUCTION
SUMMARY OF DISPARITY ANALYSIS FOR
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Business Category by M/WBE Classification	% of Dollars ¹	% of Available Firms ²	Disparity Index ³	Disparate Impact of Utilization	Significance of Proportions ⁴
Architecture & Engineering Prime Consultants					
African Americans	0.10%	3.02%	3.16	* Underutilization	-21.10 *
Hispanic Americans	0.41%	1.81%	22.50	* Underutilization	-4.91 *
Asian Americans	1.25%	2.29%	54.75	* Underutilization	-2.08 *
Native Americans	2.54%	0.40%	631.64	Overutilization	3.03 *
Nonminority Women	5.74%	8.51%	67.41	* Underutilization	-2.66 *
Nonminority Firms	89.97%	83.97%	107.14	Overutilization	4.45 *
Professional Services Prime Contractors					
African Americans	1.08%	7.60%	14.16	* Underutilization	-22.08 *
Hispanic Americans	0.68%	1.15%	59.67	* Underutilization	-1.96 *
Asian Americans	3.99%	1.97%	202.84	Overutilization	3.61 *
Native Americans	1.55%	0.82%	189.07	Overutilization	2.06 *
Nonminority Women	8.75%	10.55%	82.92	Underutilization	-2.23 *
Nonminority Firms	83.96%	77.92%	107.74	Overutilization	5.74 *
Other Services Prime Contractors					
African Americans	2.59%	5.60%	46.23	* Underutilization	-15.50 *
Hispanic Americans	0.85%	0.39%	217.31	Overutilization	4.07 *
Asian Americans	1.42%	0.46%	306.40	Overutilization	6.61 *
Native Americans	1.08%	0.27%	401.72	Overutilization	6.42 *
Nonminority Women	5.99%	4.71%	127.31	Overutilization	4.42 *
Nonminority Firms	88.06%	88.57%	99.43	Underutilization	-1.26
Goods & Supplies Prime Contractors					
African Americans	2.22%	3.29%	67.51	* Underutilization	-5.58 *
Hispanic Americans	0.32%	0.47%	68.35	* Underutilization	-2.03 *
Asian Americans	1.84%	0.74%	248.15	Overutilization	6.30 *
Native Americans	0.04%	0.25%	14.70	* Underutilization	-8.62 *
Nonminority Women	2.62%	3.62%	72.21	* Underutilization	-4.86 *
Nonminority Firms	92.96%	91.62%	101.46	Overutilization	4.04 *

* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

¹ The percentage of construction-related contract dollars awarded to firms within the relevant market area.

² The percentage of available firms in the relevant market area.

³ The disparity index is the ratio of % utilization to % availability times 100.

⁴ The significance of proportions test examines if there is a statistical difference between utilization and availability. The test statistics are computed by taking the difference between utilization and availability and dividing by the square root of availability, times one, minus availability divided by the available firms. If the test statistics are greater than two, overutilization is assumed. Conversely, if the test statistics are less than -2, underutilization is assumed.

FINDING 8-3: M/WBE Program Suspension

At the prime contractor level, a significant decrease in M/WBE utilization following the suspensions of the Minority Women Business Development (M/WBD) program came in Professional Services and Architecture and Engineering as shown in **Exhibit 8-4**:

- Professional Services fell from an average of 17.98 percent from 1998 to 2001 to 8.85 percent in 2002.
- Architecture and Engineering fell from an average of 10.65 percent from 1998 to 2001 to 6.69 percent in 2002.

**EXHIBIT 8-4
CHARLOTTE CONSTRUCTION
COMPARISON OF HIGHEST LEVEL OF M/WBE PRIME CONTRACTING
IN STUDY PERIOD
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Work Type Classification	Highest % Amount of Prime Contractor Spending	Year	Average 1998-2001	Prime Contractor Spending in 2002
Construction Less Than \$30,000	20.99%	2001	18.20%	19.94%
Construction Greater Than \$30,000	21.88%	1998	13.62%	19.68%
Architecture & Engineering	16.04%	2001	10.65%	6.69%
Professional Services	26.18%	1999	17.98%	8.85%
Other Services	12.20%	2001	11.30%	15.29%
Goods and Supplies	13.51%	1999	6.57%	8.82%

FINDING 8-4: Private Sector Utilization and Disparity

M/WBE utilization was substantially lower in the private sector commercial construction market than in City contracting (**Exhibit 8-5**). Similar results were found in a review of building permits data and data from Reed Construction, a private construction contracting database. Substantial disparity existed for the following underutilized groups in the commercial private sector construction prime contracts from 1998 to 2002:

- Construction: Prime Contracts – African American, Hispanic American, Asian American, and Native American.

There are also significant differences in utilization of M/WBE contractors between the City of Charlotte and the construction contracts in the building permits database. The City of Charlotte utilized 54 M/WBE prime contractors on \$1.1 billion in spending with prime contractors versus 69 M/WBEs in the private sector on \$4.5 billion in spending with prime contractors. There were five M/WBEs and 23 nonminority prime contractor that were utilized in both the building permit data and by the City.

**EXHIBIT 8-5
COMPARISON OF M/WBE UTILIZATION PERCENTAGE OF DOLLARS
PRIVATE COMMERCIAL CONSTRUCTION
AND CHARLOTTE
CALENDAR YEARS 1998 THROUGH 2002**

Business Category/Data Source	African American	Hispanic American	Asian American	Native American	Nonminority Women	M/WBEs	Nonminority Firms
Prime Contractors							
Charlotte Construction Prime Contractors	3.32%	0.04%	4.47%	0.28%	6.65%	18.94%	81.06%
Private Construction Prime Contractors (Building Permits)	0.08%	0.02%	0.06%	0.00%	6.81%	6.97%	93.03%
Private Construction Prime Contractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.99%	0.99%	99.01%

8.2.2 Other Factors Accounting for Prime Contractor Disparities

FINDING 8-5: M/WBE Utilization and Contract Size

MGT provided data on utilization as a function of contract size. As can be seen in **Exhibit 8-6** below, M/WBE prime utilization was generally lower for larger size contracts.

**EXHIBIT 8-6
CITY OF CHARLOTTE
M/WBE UTILIZATION ON CONTRACTS IN EXCESS OF \$1 MILLION
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Business Category	Overall M/WBE Percentage of Number of Contracts	M/WBE Percentage of Number of Contracts > \$1 million
Construction Greater than \$30,000	18.94%	18.75%
Architecture & Engineering	19.90%	5.56%
Professional Services	42.13%	16.67%
Other Services	14.30%	3.33%
Goods and Services	11.03%	0.00%

FINDING 8-6: Detailed Analysis of M/WBE Utilization by Business Category

An analysis of utilization and disparity was provided when the business categories (Construction, Architecture and Engineering, Professional Services, Other Services, and Goods and Supplies) were decomposed into more defined units. For example, construction was decomposed into heavy construction, building construction, and specialty trades. Highlights of this decomposition analysis include the following:

- M/WBE utilization in building construction was 3.0 percent, heavy construction 17.1 percent, and specialty construction was 21.1 percent.
- The business subcategories where there was M/WBE availability, but the existing evidence indicates that M/WBE utilization was low include: building construction, legal services, accounting services, auto purchases, office supplies, janitorial services, maintenance services, and temporary help services.

FINDING 8-7: Regression Analysis

As an aggregated group, M/WBE firms responding to the on-line survey earned less revenue in 2002 than did non-M/WBE firms. Analysis of the effect on reported company earnings of variables representing firm capacity, managerial ability and experience, and race/gender/ethnicity revealed that for some minority groups the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. For example, when the effects of capacity and managerial characteristics were controlled for, African American firms still reported significantly lower gross revenue than their nonminority counterparts. (Unfortunately, this relationship could not be calculated for other racial and ethnic respondents due to inadequate subsample sizes). When the analysis explored variable effects within individual business categories, the differential “effect”

associated with “being an M/WBE” was most pronounced in the “Goods and Supplies” category and least pronounced in the “Professional Services” category.

FINDING 8-8: Bidding Requirements

North Carolina state procurement law also has some bearing on the explanation of disparity. Where present, some disparities can be accounted for by requirements of North Carolina state law that construction contracts above \$5,000 and contracts for apparatus, supplies, materials, and equipment above \$100,000 be awarded to the “lowest responsible bidder.” North Carolina law requires local units of government to use a “qualification based” selection procedure in the selection of architects and engineers but provides very few constraints on the purchase of services.

8.3 Anecdotal Evidence Findings – Prime Contractors

The following subsection presents findings and recommendations based on the review presented in Chapter 6.0.

FINDING 8-9: Barriers to Participation

The three most common factors included: limited information received on pending projects (M/WBEs as a group, 23 percent; nonminority male-owned firms, 21 percent); how agencies classified a company’s services (M/WBEs as a group, 16 percent; nonminority male-owned firms, 14 percent); and problems with bid specifications (M/WBEs as a group, 13 percent; nonminority male-owned firms, 15 percent). The rate at which respondents reported barriers with each of the three agencies was roughly equivalent, regardless of race, ethnicity, or gender of firm ownership. In interviews, M/WBEs are also concerned about lack of notification about informal contracts.

FINDING 8-10: Perceptions of Discrimination

Contractors felt that City inspectors do not treat each job the same, and it is dependent on where the job is located and who is doing it. Concern over inspectors was also expressed in one interview with City staff. The majority of complaints relative to City inspectors were from African American and Hispanic American-owned firms.

Minority vendors also felt that they were treated differently relative to change orders and informal contracts than nonminority male-owned firms, in that they were not given as much flexibility in change orders and were not called for informal contracts.

There were several instances of a vendor self-reporting being the low bidder and not getting the job, when they felt they should have.

8.4 Recommendations for Prime Contracting

8.4.1 Small and M/WBE Business Program Recommendations

COMMENDATION and RECOMMENDATION 8-1: Small Business Program

Charlotte should be commended for establishing a small business opportunity (SBO) program following the suspension of its M/WBE program as a result of the court order in *United Construction Company v. City of Charlotte*. A strong SBO program is at the center of a narrowly tailored program to promote M/WBE utilization. The City has taken a number of important steps in crafting a strong SBO program in prime contracting, which may come to be viewed as a national model in this area, including:

- setting key business unit (KBU) goals for small business enterprise (SBE) utilization for informal contracts;
- making SBE utilization part of KBU performance review;
- encouraging M/WBE participation in the SBE program;
- adding quick payment provisions; and
- changing the SBE definition to a percentage of the SBA definition of small businesses.

North Carolina law in general precludes the use of set-asides and bid preferences by the SBO program for certain procurement areas. Charlotte should consider the selective use of small business set-asides and bid preferences in those areas of procurement where such procurement techniques are not constrained by state law.

Another variant of an SBO program is incentives to SBEs located in distressed areas. For example, under the 1997 Small Business Reauthorization Act, the federal government started the federal HUBZone program. A HUBZone firm is a small business that is: (1) owned and controlled by U.S. citizens; (2) has at least 35 percent of its employees who reside in a HUBZone; and (3) has its principal place of business located in a HUBZone.⁶ HUBZone programs can serve as a vehicle for encouraging M/WBE contract utilization. Nationally there are 4,743 M/WBE HUBZone firms, 58.2 percent of total HUBZone firms.⁷ In North Carolina there are 153 female and minority HUBZone firms, 56.2 percent of total HUBZone firms in the state. Of those 153 female and minority HUBZone firms, 72 are in construction.

RECOMMENDATION 8-2: M/WBE Prime Contractor Goals

The City of Charlotte should tailor its M/WBE participation programs to remedy the specific disparity determined above. M/WBE programs should address each case of

⁶ 13 C.F.R. 126.200 (1999). The State of California provides a 5 percent preference for a business work site located in state enterprise zones and an additional 1-4 percent preference (not to exceed \$50,000 on goods and services contracts in excess of \$100,000) for hiring from within the enterprise zone. (Cal Code Sec 4530 *et seq.*) Minnesota's bid preferences are limited to small businesses operating in high unemployment areas.

⁷ Based on the SBA pro-net database located at <http://pro-net.sba.gov/pro-net/search.html>. However, at present there are only six firms certified as HUBZone firms in the Charlotte MSA.

disparity within each specific business category. This report provides evidence supporting the institution of a moderate program to promote M/WBE prime contractor utilization. These aspirational goals should be addressed by more outreach, reporting M/WBE utilization by KBU, breaking up large contracts, including M/WBEs in solicitations of informal contracts, and M/WBE participation in the SBO program (discussed below) and similar techniques. **Exhibit 8-7** is submitted to serve as a guide to Charlotte in implementing its goals programs.

**EXHIBIT 8-7
CITY OF CHARLOTTE
RECOMMENDED RACE AND GENDER GOALS FOR EACH BUSINESS CATEGORY
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Business Category by M/WBE Classification	% of Available Firms	Disparity Index Goal - 80.0
Construction Prime Contractors Less Than \$30,000		
African Americans	8.55%	6.84%
Hispanic Americans	1.74%	1.40%
Asian Americans	0.82%	0.66%
Native Americans	0.61%	0.48%
Nonminority Women	7.19%	5.75%
Construction Prime Contractors Greater Than \$30,000*		
African Americans	7.43%	5.95%
Hispanic Americans	0.34%	0.27%
Asian Americans	2.03%	1.62%
Native Americans	0.68%	0.54%
Nonminority Women	8.78%	7.03%
Architecture & Engineering Prime Consultants		
African Americans	3.02%	2.41%
Hispanic Americans	1.81%	1.45%
Asian Americans	2.29%	1.83%
Native Americans	0.40%	0.32%
Nonminority Women	8.51%	6.81%
Professional Services Prime Contractors		
African Americans	7.60%	6.08%
Hispanic Americans	1.15%	0.92%
Asian Americans	1.97%	1.57%
Native Americans	0.82%	0.66%
Nonminority Women	10.55%	8.44%
Other Services Prime Contractors		
African Americans	5.60%	4.48%
Hispanic Americans	0.39%	0.31%
Asian Americans	0.46%	0.37%
Native Americans	0.27%	0.22%
Nonminority Women	4.71%	3.76%
Goods & Supplies Prime Contractors		
African Americans	3.29%	2.63%
Hispanic Americans	0.47%	0.38%
Asian Americans	0.74%	0.59%
Native Americans	0.25%	0.20%
Nonminority Women	3.62%	2.90%

* Bidder availability was used for all groups except Hispanic Americans, for which vendor availability was used.

8.4.2 Procurement Recommendations

RECOMMENDATION 8-3: Contract Sizing

The City of Charlotte should concentrate its efforts on issuing contracts in smaller dollar amounts, thus expanding the opportunities that smaller M/WBE firms have to do business with Charlotte. As recommended in the OMB Contract Bundling Report, the City of Charlotte should consider limiting the use of contract bundling to those instances where there are considerable and measurable benefits such as decreased time in acquisition, at least 10 percent in cost savings, or improved contract terms and conditions.⁸

Charlotte should also consult with North Carolina agencies, primarily large universities, that report positive experience on enhancing M/WBE utilization under Construction Management (CM) At Risk method of delivery of construction services for large projects. CM At Risk can produce more flexibility in the project sizing and an environment more conducive to M/WBE subcontractor bidding.

If contract bundling is still necessitated, the City of Charlotte should consider placing Small Business Enterprise (SBE) and/or M/WBE goals (where justified by continued disparity in the context of a narrowly tailored program) on larger contracts.

RECOMMENDATION 8-4: Construction Management and Job Order Contracting

One method of debundling in construction is through the use of multi-prime construction contracts in which a construction project is divided into several prime contracts that are then managed by a construction manager at risk. For example, this approach has been used on projects where each prime contractor is responsible for installation and repair in particular areas. The construction manager is responsible for obtaining materials at volume discounts based upon total agency purchases. If one contractor defaults a change order is issued to another prime contractor working in an adjacent area. The construction manager at risk is responsible for cost overruns that result from prime contractor default.

Construction management also facilitates the rotation of contracts within an area of work. For example, if several subcontractors have the capacity of bidding on an extended work activity (e.g., concrete flat work, traffic control, hauling), the construction manager can rotate contracting opportunities over the duration of the activity.

Using a request for proposal process provides the flexibility for including M/WBE participation in prime contractor requirements and selection. One of the non-financial criteria can be the proposer's approach and past history with M/WBE subcontractor utilization and female and minority workforce participation. In an RFP process, firms could also be required to use the projects as a training forum for prospective MBEs to learn the technical and business aspects of a particular industry. The successful proposer would be required to teach a curriculum in conjunction with the technical performance of the contract, and to provide hands-on experience for MBE program participants. A number of universities in North Carolina, the Charlotte-Mecklenburg

⁸ Office of Management and Budget, Contract Bundling—A Strategy for Increasing Federal Contracting Opportunities for Small Business (October 2002).

School System and the Tri-County Metropolitan Transportation District of Oregon have had a successful experience with construction management and M/WBE participation.⁹

RECOMMENDATION 8-5: Procurement Cards

The City should consider asking that its procurement card vendor provide reports of Charlotte spending with M/WBEs. Such a service is provided by certain procurement card vendors. For example, the State of Virginia, which does not have either an M/WBE program or an SBE program, collects information of procurement card spending with M/WBEs. In addition, the Procurement Services Division should provide KBUs with lists of M/WBEs that KBUs can use the procurement cards with, in addition to existing lists of firms.

RECOMMENDATION 8-6: M/WBE Utilization on State Contracts

The City should consider instituting a policy of encouraging purchasing staff to use M/WBEs that are on North Carolina state contracts and identified as such when the City uses state contracts in purchasing.

COMMENDATION 8-7: Vendor Sourcing

Charlotte should be commended for recognizing the limitations on vendor sourcing in its current system. Charlotte had no formal vendor management system with full procurement functionality prior to 2003. Charlotte is currently installing a new vendor management system that allows for vendor searches by commodity code and bid notification.

This vendor management system should include mandatory centralized bidder registration that captures all firms interested in bidding on Charlotte contracts or receiving payment for goods or services provided to Charlotte. Charlotte should move towards setting SBE/M/WBE goals based upon availability as measured by this system.

RECOMMENDATION 8-8: Prompt Payment

The State of North Carolina has a prompt payment statute. Nevertheless, small and M/WBE vendors still have problems with prompt payment. Certain subcontractors that work on an early phase in a project, such as grading, can suffer from retainage withheld on long lasting projects. Prompt payment policy should be adjusted for these concerns. Mobilization payments is one vehicle to address this issue. For example, in 2000, the City of Chicago revised its M/WBE ordinance to allow the City to make advance payments of 10 percent of the total contract value, up to a maximum of \$200,000. The previous limit for advance payments was \$50,000.

RECOMMENDATION 8-9: Discretionary Purchase Solicitations

The City should have a policy of including one or two M/WBEs in its informal solicitations under \$25,000. The policy of including M/WBEs in discretionary purchase solicitations should be made part of the City of Charlotte's Procurement Services Division Policy and Procedures Manual.

⁹ Federal Transit Administration, *Lessons Learned #45*, May 2002).
www.fta.dot.gov/library/program/11/man/1145.html

8.5 Statistical Analyses Findings – Subcontracting

8.5.1 Data on Subcontracting

FINDING 8-11: Disparity in Construction Subcontracting

MGT was able to collect fairly complete data on M/WBE construction subcontracting but was unable to collect complete data for majority male firm construction subcontracting. Nevertheless, there were several findings relevant to policy recommendations:

- Overall, Charlotte prime contractors spent \$23.3 million with M/WBE subcontractors over the study period, 3.07 percent of total construction spending in the relevant market. The two largest M/WBE subcontracting groups were nonminority women, with 1.03 percent of total construction spending, and African American firms with 0.87 percent of total construction spending over the study period.
- The study did find M/WBE rough parity in construction subcontracting during the MWBD program, assuming levels of overall subcontracting equal to census measures of the overall percentages of subcontracting in the construction industry in North Carolina (27.1%) (**Exhibit 8-8**) for the five-year study period.¹⁰
- During calendar year 2002, after suspension of the MWBD program, there was substantial disparity for all M/WBE categories, assuming levels of overall subcontracting equal to census measures of the overall percentages of subcontracting in the construction industry in North Carolina (27.1%) (**Exhibit 8-9**).

**EXHIBIT 8-8
CITY OF CHARLOTTE
SUBCONTRACTOR ESTIMATES
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

M/WBE Classification	% of Dollars¹	% of Available Firms²	Disparity Index³	Disparate Impact of Utilization
27.1% Subcontracting				
African Americans	3.24%	2.91%	111.22	Overutilization
Hispanic Americans	0.46%	0.50%	92.45	Underutilization
Asian Americans	0.04%	0.23%	18.62	* Underutilization
Native Americans	0.19%	0.15%	128.24	Overutilization
Nonminority Women	3.82%	2.02%	188.56	Overutilization

* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

¹ The percentage of construction related contract dollars awarded to firms within the relevant market area.

² The percentage of available firms in the relevant market area.

³ The disparity index is the ratio of % utilization to % availability times 100.

¹⁰ This conclusion results from multiplying total construction dollars by 27.1 percent, resulting in the total level of subcontracting and then dividing the total dollar level of M/WBE subcontracting from the estimated level of construction subcontracting.

**EXHIBIT 8-9
DISPARITY ANALYSES OF CONSTRUCTION SUBCONTRACTORS
IN THE RELEVANT MARKET AREA
BY RACE/ETHNICITY/GENDER CLASSIFICATION
CALENDAR YEAR 2002**

M/WBE Classification	% of Subcontract Dollars ¹	% of Available Firms ²	Disparity Index ³	Disparate Impact of Utilization
Calendar Year 2002				
African Americans	0.57%	2.91%	19.45	* Underutilization
Hispanic Americans	0.06%	0.50%	11.22	* Underutilization
Asian Americans	0.05%	0.23%	23.40	* Underutilization
Native Americans	0.06%	0.15%	37.42	* Underutilization
Nonminority Women	1.52%	2.02%	75.34	* Underutilization
Nonminority	97.75%	94.20%	103.77	Overutilization

* An asterisk is used to indicate a substantial level of disparity – index below 80.00.

¹ The percentage of dollars is taken from the subcontractor utilization (based on 27.1%) exhibit previously shown in Chapter 4.0.

² The percentage of available subcontractors is taken from the availability exhibit previously shown in Chapter 4.0.

³ The disparity index is the ratio of % utilization to % availability times 100.

FINDING 8-12: M/WBE Program Suspension and Construction Subcontracting

Spending with M/WBE construction subcontractors following termination of the M/WBD program fell from \$9.0 million in 2000 to \$1.7 million in 2002 (**Exhibit 8-10 below**), an 81.1 percent decline. Every M/WBE group, except Native Americans, experienced a fall in construction subcontractor utilization. Overall, M/WBE construction subcontractor utilization fell from 12.20 (1998-2001) to 4.13 percent in 2002.¹¹

**EXHIBIT 8-10
CITY OF CHARLOTTE
COMPARISON OF HIGHEST LEVEL OF M/WBE SUBCONTRACTING
IN STUDY PERIOD
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

M/WBE Classification	Highest \$ Amount of Subcontractor Spending	Year	Average 1998 - 2001	Subcontractor Spending in 2002
African Americans	\$3,716,839.76	2000	\$2,354,622.84	\$321,319.70
Hispanic Americans	\$489,088.12	2000	\$336,518.76	\$31,522.56
Asian Americans	\$44,905.00	1998	\$24,145.00	\$30,000.00
Native Americans	\$489,967.63	2000	\$134,636.41	\$31,365.00
Nonminority Women	\$4,336,783.49	2000	\$2,654,968.57	\$865,576.30
M/WBE Total	\$9,045,859.00	2000	\$5,504,891.57	\$1,279,783.56

FINDING 8-13: Private Sector M/WBE Subcontractor Utilization

M/WBE utilization was substantially lower in the private sector commercial construction market than by the City (**Exhibit 8-11**). Substantial disparity existed for the following underutilized groups in the commercial private sector construction from 1998 to 2002:

- Construction: Subcontracts – African American, Hispanic American, Asian American, Native American and Nonminority Women.

¹¹ Assuming that 27.1 percent of prime dollars were spent with subcontractors.

**EXHIBIT 8-11
COMPARISON OF M/WBE UTILIZATION PERCENTAGE OF DOLLARS
PRIVATE COMMERCIAL CONSTRUCTION
AND CHARLOTTE
CALENDAR YEARS 1998 THROUGH 2002**

Business Category/Data Source	African American	Hispanic American	Asian American	Native American	Nonminority Women	M/WBEs	Nonminority Firms
Subcontractors							
Charlotte Construction Subcontractors	28.61%	4.05%	0.37%	0.23%	10.09%	18.94%	81.06%
Private Construction Subcontractors (Building Permits)	0.46%	0.00%	0.05%	0.00%	0.92%	1.43%	98.57%
Private Construction Subcontractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

There are also significant differences in utilization of M/WBE subcontractors between the City of Charlotte and the construction contracts in the building permits database. The City of Charlotte used 179 M/WBE subcontractors, whereas the private sector used only 28 M/WBE subcontractors. MGT found only one M/WBE subcontractor used by the City that was used in the private sector commercial construction market.

8.6 Anecdotal Evidence Findings – Subcontractors

FINDING 8-14: Informal Networks

More than half of M/WBEs and three-quarters of African Americans who responded agreed that there was an informal network of prime and subcontractors in the Charlotte area. One-third of all M/WBEs felt this network excluded them in public sector bidding and awards, compared with 15 percent of nonminority male-owned firms. A greater percentage of respondents felt that an informal network excluded them from bidding or winning a contract in the public sector than in the private sector.

FINDING 8-15: Relations with Prime Contractors

The results of the survey, personal interviews, and focus groups indicate that there have been instances of prime contractors not responding to a subcontractor bid or quote, of subcontractors not being paid on a timely basis by primes, and of vendors being excluded by prime contractors for “speaking out.”

8.7 Recommendations for Construction Subcontracting

COMMENDATION 8-10: Small Business Program

The City has taken a number of important steps in crafting a strong SBO program in subcontracting, including:

- SBE goals on formal contracts;
- requiring good faith negotiations by bidders with SBEs;
- mandating SBE outreach and good faith efforts by bidders;
- making SBE utilization part of KBU performance review;
- rejecting bids for bidder noncompliance with the SBO program;
- encouraging M/WBE participation in the SBE program; and
- using existing ordinances to impose mandatory subcontracting clauses where such clauses would be consistent with industry practice and would promote SBE utilization.¹²

¹² The Charlotte city charter Section 8.8.2 already allows for mandatory subcontracting in construction and repair contracts. San Diego as part of its Subcontractor Outreach Program (SCOPE) has mandatory outreach, mandatory use of subcontractors, and mandatory submission of an outreach document. Whether a contract has subcontracting is determined by the engineer on the project.

RECOMMENDATION 8-11: M/WBE Goals in Construction Subcontracting

There is evidence supporting the use of race- and gender-conscious methods to promote M/WBE utilization in construction subcontracting in the event that the SBO is not successful in encouraging the use of M/WBEs as subcontractors. This conclusion is based on:

- the decrease in M/WBE construction subcontractor utilization following M/WBE program termination;
- strong disparities in private sector utilization;
- the stronger M/WBE construction subcontractor utilization by the City in comparison to the private sector; and
- the low utilization of City prime contractors of M/WBE subcontractors in private sector commercial construction.

Nevertheless, any race-conscious program elements should be implemented taking into consideration the USDOT DBE program (**Exhibit 8-1 above**). In addition, in the course of implementing such a race-conscious goal program, the following should be considered.

- On an annual basis, the City of Charlotte should review its budget and establish annual goals, in dollars and percentages, consistent with M/WBE availability, for each M/WBE group that has demonstrated significant disparity.
- Annual goals for each ethnic group and women should reflect M/WBE availability as referenced in this report. The purpose of annual participation goals is to assist the City of Charlotte in monitoring the success of the remedial program. Currently, the City of Charlotte does not have a method of measuring where the M/WBE participation level is on the continuum between the current level of disparity and full participation (disparity index of 100).
- The program should be time limited, and graduation criteria established for each participant. One consideration in establishing the date for termination or sunset of the M/WBE program should be whether significant disparity in the utilization of M/WBEs in the private sector by City contractors and vendors has been eliminated.
- There should be lower M/WBE subcontractor goals on contracts for specialty contracts where subcontracting is on average 8.6 percent of total project value, and higher goals on building contracts, where subcontracting is on average 43.9 percent of total project value.
- Charlotte should continue to concentrate primarily on the scope of all race- and gender-specific programs to firms that are located in the relevant market area for specific business categories. Firms located

outside of the market area that have not previously attempted to perform work for Charlotte for each business category should not be eligible for any race- or gender-specific programs within that category.

- The burden of compliance with M/WBE goals should not fall disproportionately on a few departments, absent some business reason for uneven distribution of M/WBE spending by department.

Exhibit 8-12 provides guidance on setting initial annual goals for a construction subcontractor M/WBE program. These M/WBE goals are annual goals, not rigidly set project goals. Each project should be reviewed individually for establishing project-specific M/WBE goals. The City should establish a race- and gender-neutral component of the goal based on M/WBE subcontractor spending since 2002, when the M/WBD program was suspended. Each year the goals should be adjusted according to the utilization of M/WBEs by race- and gender-neutral means, gradually reducing the race and/or gender goal and increasing the neutral goal. The ultimate objective is to eliminate the need for a race- and/or gender-based program and replace it completely with the race- and gender-neutral options.

**EXHIBIT 8-12
CITY OF CHARLOTTE
RECOMMENDED RACE & GENDER SPECIFIC & NEUTRAL GOALS
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATIONS**

Business Category by M/WBE Classification	% of Available Firms	Disparity Index Goal - 80.0	Race/Gender Neutral Goal	Race/Gender Conscious Goal
Construction Subcontractors				
African Americans	2.91%	2.33%	0.51%	1.82%
Hispanic Americans	0.50%	0.40%	0.05%	0.35%
Asian Americans	0.23%	0.18%	0.05%	0.13%
Native Americans	0.15%	0.12%	0.12%	0.00%
Nonminority Women	2.02%	1.62%	1.38%	0.24%

COMMENDATION 8-12: Commercial Antidiscrimination Rules

Charlotte should be commended for passing a commercial nondiscrimination ordinance (although it has yet to be approved by the North Carolina State Legislature). Some courts have noted that putting in place antidiscrimination rules is an important element of race-neutral alternatives.¹³ Nationally, some agencies adopted requirements to ensure that their procurement and their prime contractor procurement were not discriminatory (e.g., San Diego; Seattle; Columbia, South Carolina; Charlotte). The proposed Charlotte ordinance has created a policy that says the agency will not engage in business with any firms that discriminate in the solicitation, selection, or treatment of contractors,

¹³ *Engineering Contractors v. Dade County*, 943 F.Supp 1546 (SD Fla 1996).

subcontractors, vendors, and information suppliers on any agency contract. The policy provides for:

- a mechanism whereby complaints may be filed against firms that have discriminated in the marketplace;
- due process, in terms of an investigation by agency staff;
- a hearing process before an independent hearing examiner;
- an appeals process to the agency manager and ultimately to a court; and
- imposition of sanctions, including:
 - disqualification for up to five years from bidding with the agency;
 - termination of all existing contracts; and
 - referral for prosecution for fraud.

8.8 Recommendations for Business Development

RECOMMENDATION 8-13: Bonding

Lack of bonding is often cited by small construction firms as the reason for not pursuing government contracting opportunities. Many SBEs have worked in residential or private construction that does not always require bonding, or as subcontractors who were bonded under the prime contractor. A small business surety assistance program should provide technical assistance to small firms, track subcontractor utilization by ethnicity, coordinate existing financial as well as management and technical assistance resources, and provide for quality surety companies to participate in the bonding program.

One starting point would be collaborating with the North Carolina Department of Transportation (NCDOT) on bonding assistance efforts. NCDOT, through its supportive services contract, has funded a DBE Pilot Bonding Assistance Program since 2000. The bonding program is open to any DBE that holds or is in the process of obtaining an NCDOT contract. The program is for bid, payment, and performance bonds of up to \$1 million. The program is administered through the USDOT Office of Small and Disadvantaged Business Utilization, the Minority Business resource Center, and participating sureties.

Another example of a bonding program is from Allegheny County, Pennsylvania. Allegheny County has a bonding program in which participants are preapproved for up to \$100,000 in bonding on a maximum of two projects within the County. Approved firms must attend monthly business development sessions covering financial management, taxes, marketing, and credit management. Firms are allowed to participate in the program for up to 18 months. Amwest Surety Insurance Company issues the bonds. Allegheny County guarantees the bonds through the Industrial Development Authority and Community Development Block Grant (CDBG) funds.

COMMENDATION and RECOMMENDATION 8-14: Access to Capital

Charlotte should be commended for attempting to strengthen its small business lending assistance through the existing Equity Loan Fund and Charlotte's current efforts to fund a \$10 million SBE Loan Fund in conjunction with a number of local financial institutions.

These programs can be strengthened with a linked deposit feature. Linked deposit programs are essentially a vehicle for providing lower interest rates on loans for small and minority business, nonprofits, and housing development. Agencies use linked deposit programs to subsidize lower rates for business and housing loans by accepting a lower rate on their deposits with participating financial institutions.

There are a number of areas where local government bodies participate in linked deposit programs. For example, the New York State Linked Deposit program provides two-year financing at reduced rates to small and minority businesses. The New York State Linked Deposit program makes loans of up to \$10 million to certified M/WBEs and SBEs that have been awarded agency contracts. To participate, service businesses must have fewer than 100 employees and not be dominant in their field of operation. Businesses in economic development zones, highly distressed areas, and defense and certified M/WBEs are eligible for 3 percent interest rate reduction. The program has been in place for ten years.¹⁴

COMMENDATION and RECOMMENDATION 8-15: Management and Technical Services

Charlotte should be commended for its current attempts to strengthen its efforts in providing management and technical services to SBE and M/WBE firms, including the Business and Entrepreneurial Skills Training (BEST) Program, the On-line Business Resource Center/Virtual Business Incubator, and the Small Business Information Center.

The City of Charlotte should contract with an outside management and technical assistance provider to provide needed technical services, particularly in the area of loans and bonding, and for providing incentives to produce results. The contract should also include incentives for assisting new SBEs and M/WBEs in being registered as qualified vendors with the City of Charlotte and assisting SBEs and M/WBEs in graduating to prime contracts.

For example, the Port Authority of New York and New Jersey has a three-year fee-for-service contract with the Regional Alliance capped at \$275,000.¹⁵ Previously the contract was a flat grant, but it was changed to a fee-for-service arrangement to reward creativity with money. Similarly, the City of Phoenix tracks its management and technical assistance to determine if training results in contract award.

¹⁴ Montgomery County, Maryland, and Chicago are other local governments with notable linked deposit programs. Charlotte did consider linked deposit programs and elected not to implement such a program at the present time for policy reasons.

¹⁵ The Regional Alliance was started in 1989. For general background on the Regional Alliance see Timothy Bates, *Case Studies of State Minority Business Assistance Programs*, report for the U.S. MBDA, September 1993.

RECOMMENDATION 8-16: Promoting M/WBE Collaboration

M/WBE capacity can be increased by joint ventures among M/WBEs. For example, in Oregon the Northeast Urban Trucking Consortium, a consortium of seven M/WBE independent trucking firms with fifteen trucks, joined together to win a \$2 million trucking contract.

8.9 Recommendations for the SBO Office

COMMENDATION and RECOMMENDATION 8-17: M/WBE Program Data Management

It is imperative for the City of Charlotte to closely monitor the utilization of all businesses by race, ethnicity, and gender to determine whether the small business program over time has the potential to eliminate race and gender disparities without specific race and gender goals.

Charlotte should be commended for now requiring that all contractors maintain data on all subcontractors utilized on a Charlotte project. This list includes all subcontractors utilized (minority, women, and nonminority), the total amount paid, and the race/ethnicity/gender of the owner. However, these data should be submitted to the City before the prime contractor's final payment for services.

It is also equally important to identify, for future availability analysis, the number of construction prime contractors and subcontractors available. Because the City of Charlotte does not collect these data, it is limited in the type of availability analysis it can conduct. The City of Charlotte can address the prime contractors through the vendor management system discussed in Commendation 8-7.

In order for the City to accurately monitor the small business program and assist the City of Charlotte in future availability analyses, Charlotte should require all contractors to submit a list of all subcontractors contacted in preparation of their bid package. The list of potential subcontractors should include the proposed service, bid amount, and the race/ethnicity/gender of the business owner(s). The data will allow the City of Charlotte to accurately identify the number of actual subcontractors available. These data should be analyzed and reviewed periodically (at least quarterly) and the SBO program adjusted accordingly.

COMMENDATION and RECOMMENDATION 8-18: M/WBE/SBE Outreach

The City should be commended for beginning to increase the level of outreach to M/WBEs and SBEs. This outreach has ranged from workshops and seminars, placing the M/WBE/SBE list on the City of Charlotte Web site to assist prime contractors in identifying potential M/WBE/SBE subcontractors, posting more opportunities on the North Carolina State Interactive purchasing Web site, providing procurement forecasts to the contracting community, and increasing outreach on informal contracts for the SBO program.

The SBO office should review some of the novel forms of outreach on the Internet employed by other agencies across the nation. For example, the Illinois Department of Transportation (IDOT) established a *Contractor Marketplace* electronic bulletin board that allows prime and subcontractors to post information on bid opportunities and solicitations of M/WBE subcontractors.¹⁶ IDOT is planning to give subcontractors and suppliers the ability to transmit quotes to prime contractors in specific work categories. The IDOT *Contractor Marketplace* also posts a *Small Contracts List* and *Pay Items* on-line. This procedure facilitates contractor identification of bid opportunities from the detailed Pay Item reports. A project of this scale, however, would be best pursued in a consortium with other state and local agencies in North Carolina.

COMMENDATION AND RECOMMENDATION 8-19: SBO Office

The new Charlotte SBO program is a more complex and challenging program than the prior M/WBE program, for several reasons. First, reducing disparity in M/WBE utilization via race- and gender-neutral means raises more administrative demands than race- and gender-conscious tools. Second, Charlotte has already rejected bids for noncompliance with the SBO program, indicating that the program does have “teeth.” Third, the new SBO program will require training of staff in procurement and KBUs. Fourth, Charlotte has added several new business development initiatives. Charlotte should be commended for significantly increasing the number of SBO staff to meet these challenges.

The SBO office should develop its own separate balanced scorecard to flow into the scorecard developed for the Business Services Division.

¹⁶ <http://www.dot.state.il.us/const/wrkat.html>.