



Business Disparities in the Austin, Texas Market Area

Prepared for the City of Austin, Texas

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Project Team

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About the Project Team

NERA Economic Consulting is a global firm of experts dedicated to applying economic, finance and quantitative principles to complex business and legal challenges. For half a century, NERA's economists have been creating strategies, studies, reports, expert testimony and policy recommendations for government authorities and the world's leading law firms and corporations. We bring academic rigor, objectivity and real world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance and litigation.

NERA's clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world's largest economic consultancies. With its main office in New York City, NERA serves clients from over 20 offices across North America, Europe and Asia Pacific.

NERA's employment and labor experts advise clients on a wide range of issues both inside and outside the courtroom. We have provided expert testimony on statistical issues both at the class certification phase (on issues of commonality and typicality) and at the liability phase (for class or pattern-and-practice cases). Our experts have extensive experience examining issues of statistical liability in discrimination and other wrongful termination claims. We also provide detailed statistical analyses of workforce composition to identify potential disparities in hiring, layoffs, promotions, pay, and performance assessments, and have conducted studies on labor union issues and on affirmative action programs for historically disadvantaged business enterprises.

NERA Senior Vice President Dr. Jon Wainwright led the NERA project team for this Study. Dr. Wainwright heads NERA's disparity study practice and is a nationally recognized expert on business discrimination and affirmative action. He has authored books, papers, and numerous research studies on the subject, and has been repeatedly qualified to testify on these and other issues as an expert in state and federal courts. At NERA, Dr. Wainwright directs and conducts economic and statistical studies of discrimination for attorneys, corporations, governments and non-profit organizations. He also directs and conducts research and provides clients with advice on adverse impact and economic damage matters arising from their hiring, performance assessment, compensation, promotion, termination, or contracting activities.

About the Project Team

Business Resource Consultants is a City of Austin certified MBE/WBE/DBE led by Ms. Carol Hadnot, the principal owner. BRC is a leading provider of M/W/DBE marketing and outreach services in the Austin, Texas region, having worked on some of the largest and most significant public works projects in recent history. As part of this project, the BRC team included three additional prominent community leaders and M/W/DBE outreach experts—Mr. Paul Saldaña, owner of Saldaña Public Relations, Mr. Juan Oyervides, Executive Director of the U.S. Hispanic Contractors Association, Austin Chapter, and Ms. Aletta Banks, Executive Director of the Asian Contractor Association. Collectively, the BRC team's experience in Austin's minority contracting community is unparalleled. On this project, the BRC team held responsibility for all of the stakeholder and community outreach functions.

Attorney Don O'Bannon, Esq. Don O'Bannon is principal in the Law Office of Don T. O'Bannon in Dallas, Texas. He is the former Vice President of Business Diversity and Development for DFW International Airport and past chairman of the Airport Minority Advisory Council. Mr. O'Bannon is a past recipient of the M/WBE Advocate of the Year award from the Fort Worth Metropolitan Chamber of Commerce, the Business Advocate of the Year award from the Dallas-Fort Worth Hispanic Contractors' Association, and the Chairman's Award from the Dallas-Fort Worth Black Contractors' Association. On this project, Mr. O'Bannon provided a review of case law, conducted interviews with public sector personnel and with local business owners and co-drafted selected study recommendations.

The D'Moriea Consulting Agency is a City of Austin certified MWBE owned by Ms. Sundra Davis of Fort Worth, Texas. Ms. Davis served as the first ever manager of the City of Fort Worth's M/W/DBE Program and later served as that city's Assistant Director of Business Development. On this project, Ms. Davis, conducted interviews with public sector personnel and with local business owners and co-drafted selected study recommendations.

CR Dynamics & Associates, Inc. is a City of Baltimore and State of Maryland certified MBE owned by Charles and Patricia Ramos. CR Dynamics is one of the top contact/call centers in the United States, providing services to private industry and government agencies. Over the past ten years, their perceptiveness in delivering critical program management supported with high-tech solutions has become invaluable to their clients. CRD provides a variety of services, including provision of help desk services, inbound travel counseling, order taking, reservations and outbound market research survey work. On this project, CRD provided CATI survey services for both the race/gender misclassification survey and the mail survey non-respondent survey.

Combat Veteran Voicewriters, LLC is a Veterans Administration verified Service-Disabled-Veteran Owned, and SBA Economically-Disadvantaged-Woman Owned Small Business based in Mesa, Arizona and led by founder Jennifer MacGregor. CVV provides court reporting and transcription of meetings, hearings, conference sessions, interviews, interrogations, depositions and court proceedings for a variety of government agencies, commercial businesses, small businesses and non-profit

organizations. On this project, CVV provided transcription services for all of the business owner and public sector personnel interviews.

J&D Data Services is a small business enterprise owned by Mr. Joe Deegan and based in Plano, Texas. After a long career with ScanTron, Mr. Deegan started his own business to offer a solid and proven alternative to the time consuming and expensive job of key data entry long associated with mail surveys. The firm helps its clients conserve their surveying resources by designing and delivering survey instruments that can be electronically and automatically scanned upon return and sent directly to electronic format. J&D Data Services has conducted numerous surveys of M/WBEs and non-M/WBEs on behalf of the NERA team. On this assignment, they provided printing, postage, mail-out and mail-back service for the contract and subcontract data collection, the mail survey and the business owner interviews.

Report Qualifications/Assumptions and Limiting Conditions

This report is for the exclusive use of the City of Austin, Texas (“the City”). There are no third-party beneficiaries with respect to this report, and NERA Economic Consulting does not accept any liability to any third party.

Information furnished by others, upon which all or portions of this report is based, is believed to be reliable but has not been independently verified, unless otherwise expressly indicated. Public information and industry and statistical data, including contracting, subcontracting and procurement data, are from sources we deem to be reliable; however, we make no representation as to the accuracy or completeness of such information.

The opinions expressed in this report are valid only for the purpose stated herein and as of the date of this report. No obligation is assumed to revise this report to reflect changes, events or conditions that occur subsequent to the date hereof.

All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client.

In portions of this report, NERA has commented on legal issues. NERA’s comments are based on its understanding of relevant law and industry best practice, as informed by legal counsel retained by NERA. However, NERA’s comments are not, and should not be construed as, legal advice to the City. NERA recommends that the City seek and obtain advice from its own legal counsel in connection with its affirmative action programs and with this report.

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Executive Summary

A. Introduction

To ensure compliance with constitutional mandates, the City of Austin commissioned NERA Economic Consulting to examine the past and current status of minority-owned and women-owned business enterprises (“M/WBEs”) in its geographic and product markets for contracting and procurement. The results of this Study provide the evidentiary record necessary for the City’s consideration of whether to implement renewed M/WBE policies that comply with the requirements of the courts and to assess the extent to which previous efforts have provided M/WBEs full and fair opportunities to compete for its prime contracts, purchases and associated subcontracts.

This Study finds statistical evidence consistent with the presence of business discrimination against M/WBEs in the private sector of the City of Austin market area. These findings are presented in Chapters IV and V. Statistical analyses of the City’s own contracting and purchasing, which also document evidence consistent with business discrimination, are contained in Chapters II, III and VI. As a check on our statistical findings, documented in Chapter VII, we surveyed the contracting experiences of M/WBEs and non-M/WBEs in the market area and also conducted a series of in-depth personal interviews with business enterprises throughout the market area, both M/WBE and non-M/WBE.

Additionally, the City of Austin asked that we evaluate whether veteran-owned businesses (“VOBs”) and service-disabled veteran-owned businesses (“SDVOBs”) have full and fair opportunities to compete for its prime contracts, purchases and associated subcontracts. Because the constitutional standards applicable to adopting preferences for VOBs or SDVOBs are far less strict than those that apply to preferences for M/WBEs, a disparity study is not a prerequisite in order for the City to consider such preferences for VOBs or SDVOBs.¹ Nevertheless, the City took the opportunity presented in conducting a new Disparity Study to examine the status of VOBs and SDVOBs in addition to that of M/WBEs.² The Study’s findings for VOBs and SDVOBs were mixed, with some results consistent with the presence of business discrimination and other results not. All of these results are discussed, individually, below.³

B. Legal Standards for Government Affirmative Action Contracting Programs

To be legally defensible, a race-based program must meet the judicial test of constitutional strict scrutiny. Strict scrutiny is the highest level of judicial review and consists of two elements:

¹ See the discussion below in Section B of the Executive Summary and also in Appendix B.

² While the data available for the analysis of M/WBEs is limited (in comparison, for example, to the data available for studying the overall business population, the general population, or the labor force), the data available for the analysis of VOBs and SDVOBs is far more limited. Throughout the remainder of the report, while the primary focus will be on M/WBEs, when data and findings for VOBs and SDVOBs are presented, they will be clearly indicated as such.

³ In particular, see Chapters III, IV, VI and VII.

- The government must establish its “compelling interest”⁴ in remedying race discrimination by showing “a strong basis in evidence”⁵ of the persistence of discrimination. Such evidence may consist of demonstrating that the entity is a ‘passive participant’ in a system of racial exclusion....”⁶
- Any remedies adopted must be narrowly tailored to that discrimination; that is, “the means chosen to accomplish the government’s asserted purpose are specifically and narrowly framed to accomplish that purpose.”⁷

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

- Statistical evidence of “identified discrimination in [the relevant] industry,”⁸ typically established by showing the significant underutilization of minority-owned firms relative to their availability in the jurisdiction’s market area known as disparity indexes or disparity ratios.⁹
- Anecdotal evidence of race-based barriers to the full and fair participation of minority-owned firms in the market area and in seeking contract opportunities with the agency.¹⁰

The narrow tailoring prong has been met through the assessment of several factors:

- Consideration of alternative, race-neutral means to increase M/WBE participation;¹¹
- The flexibility of the program requirements, including the availability of waiver provisions;¹²
- The duration of the proposed relief;¹³

⁴ *Croson*, 488 U.S. at 492.

⁵ *Id.* at 500 (citing *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)).

⁶ *Id.* at 492.

⁷ *Sherbrooke*, 345 F.3d at 971 (citing *Grutter v. Bollinger*, 539 U.S. 306, 333 (2003)).

⁸ *Croson*, 488 U.S. at 505.

⁹ See J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, Transportation Research Board of the National Academies, NCHRP Report, Issue No. 644, 2010, pp. 5-6.

¹⁰ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994) (“*Concrete Works II*”) (“Personal accounts of actual discrimination or the effects of discriminatory practices may, however, vividly complement empirical evidence. Moreover, anecdotal evidence of a municipality’s institutional practices that exacerbate discriminatory market conditions are often particularly probative. Therefore, the government may include anecdotal evidence in its evidentiary mosaic of past or present discrimination.”). See also *Adarand VII*, 228 F.3d at 1166 (“Both statistical and anecdotal evidence are appropriate in the strict scrutiny calculus, although anecdotal evidence by itself is not.”).

¹¹ *Croson*, 488 U.S. at 507, citing *United States v. Paradise*, 480 U.S. 149, 171 (1987). See also *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 237-238 (1995) (“*Adarand III*”).

¹² *Paradise*, 480 U.S. at 171; *Adarand VII*, 228 F.3d at 1177.

- The relationship of numerical participation goals to the availability of M/WBEs in the relevant market;¹⁴
- The impact of the relief on third parties;¹⁵ and
- The overinclusiveness or underinclusiveness of the racial classifications.¹⁶

In *Adarand Constructors, Inc. v. Peña*,¹⁷ the Court extended the analysis of strict scrutiny to race-based federal enactments such as the federal (“DBE”) Program. Just as in the state and local government context, the national government must have a compelling interest for the use of race, and the remedies adopted must be narrowly tailored to meet that interest.

In contrast to race-based initiatives, preferences for VOBs or SDVOBs are subject only to a rational basis test, meaning that the government need only demonstrate that the law is related to a legitimate government purpose.¹⁸ A challenger to such a law would have the burden of proving that the policy “has no conceivable legitimate purpose or is not rationally related to it.”¹⁹

Appendix B provides an overview of constitutional standards and case law for race- and gender-conscious contracting initiatives and outlines the legal and program development issues the City of Austin should consider in evaluating its M/WBE Program, with emphasis on critical issues and evidentiary concerns.

C. Defining the Relevant Markets

Chapter II describes how the relevant geographic and product markets were defined for this Study. These definitions were derived empirically, based on the Master Contract/Subcontract Database assembled for the Study. The relevant geographic and product markets were then used to focus and frame the quantitative and qualitative analyses in the remainder of the Study.

The Master Contract/Subcontract Database contains information on 3,934 prime contracts and 9,533 associated subcontracts active during 2008-2013. These contracts and purchases had a total award value of \$4.94 billion and a total payment value of \$4.22 billion (see Table 2.1).²⁰

¹³ *Croson*, 488 U.S. at 498, 509. *See also Paradise*, 480 U.S. at 171.

¹⁴ *Paradise*, 480 U.S. at 171.

¹⁵ *Id.*

¹⁶ *Croson*, 488 U.S. at 506.

¹⁷ 515 U.S. 200 (1995) (“*Adarand III*”).

¹⁸ *See Hooper, et al. v. Bernalillo County Assessor*, 472 U.S. 612 (1985).

¹⁹ Cornell Law School, Legal Information Institute, “Rational Basis Test,” available at http://www.law.cornell.edu/wex/rational_basis_test. Moreover, whereas M/WBE programs are constitutionally required to be remedial in nature in addressing the effects of race and gender discrimination, there is no such constitutional requirement that VOB and SDVOB initiatives be remedial in nature.

²⁰ Payments on contracts that were not substantially complete at the time of the Study data collection were excluded from the paid dollar totals.

Contracts and subcontracts in the database were catalogued according to fiscal year and whether they were for Construction; Professional Services;²¹ Nonprofessional Services; or Commodities. The firms performing these contracts and subcontracts were catalogued according to geographic location, primary industry, and race and gender.

The Master Contract/Subcontract Database was analyzed to determine the geographic radius around the City of Austin that accounts for approximately 75 percent of aggregate contract and subcontract spending. The City of Austin's relevant geographic market area was determined to include the Austin-Round Rock, TX Metropolitan Statistical Area ("MSA"). The Austin-Round Rock, TX MSA includes the Texas counties of Travis, Williamson, Hays, Bastrop and Caldwell (see Tables 2.5 and 2.6).

The Master Contract/Subcontract Database was also analyzed to determine those detailed industry categories that collectively account for 99 percent of contract and subcontract spending by the City of Austin. We determined that the relevant product market includes firms in 207 different North American Industrial Classification System ("NAICS") Industry Groups and 470 NAICS Industries (see Tables 2.7 through 2.10).

D. M/WBE Availability in the City of Austin's Market Area

Chapter III estimates the percentage of establishments in the City of Austin's relevant market area that are owned by minorities or women. For each industry category, M/WBE availability was defined as the number of M/WBEs divided by the total number of business establishments in the relevant contracting market area, weighted by the dollars attributable to each detailed industry. Determining the total number of establishments in the relevant market is more straightforward than determining the number of M/WBE establishments in those markets. The latter task has three main parts: (1) identifying all listed M/WBEs in the relevant market; (2) verifying the ownership status of listed M/WBEs; and (3) estimating the number of unlisted M/WBEs in the relevant market.

Table A1 below provides an executive level summary of the current M/WBE availability estimates derived in the Study. Availability estimates for more detailed industries within the major procurement categories appear in Tables 3.12 through 3.15.

²¹ "Professional Services" is defined by Tex. Gov. Code Ann. § 2254, and includes architectural and engineering services, accounting services, landscape architecture services, medicine, optometry, real estate appraisal, and certain other consulting services.

Table A1. Overall Estimated M/WBE Availability Percentages in the City of Austin Market Area

	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority	Non-minority Female	M/WBE	Non-M/WBE
OVERALL								
AWARD DOLLARS	2.74	8.87	2.33	0.39	14.32	10.87	25.20	74.80
PAID DOLLARS	2.91	9.10	2.37	0.39	14.78	11.20	25.98	74.02
CONSTRUCTION								
AWARD DOLLARS	2.27	10.94	1.14	0.56	14.92	9.61	24.53	75.47
PAID DOLLARS	2.30	10.80	1.11	0.59	14.80	9.56	24.35	75.65
PROFESSIONAL SERVICES								
AWARD DOLLARS	1.60	7.18	2.81	0.38	11.97	6.93	18.90	81.10
PAID DOLLARS	1.64	7.54	2.90	0.40	12.49	6.74	19.22	80.78
NONPROFESSIONAL SERVICES								
AWARD DOLLARS	3.91	8.95	2.40	0.30	15.56	14.39	29.95	70.05
PAID DOLLARS	4.33	9.40	2.50	0.25	16.49	15.48	31.96	68.04
COMMODITIES								
AWARD DOLLARS	1.74	8.28	3.13	0.42	13.57	9.03	22.60	77.40
PAID DOLLARS	1.89	8.16	3.16	0.47	13.68	9.20	22.88	77.12

Source: Table 3.11.

Notes: (1) “Award” indicates that the availability measures are weighted according to dollars awarded; (2) “Paid” indicates that the availability measures are weighted according to dollars paid; (3) For this Study, “Black” or “African American” refers to an individual having origins in any of the Black racial groups of Africa; “Hispanic” refers to an individual of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; “Asian” or “Asian/Pacific Islander” refers to an individual having origins in the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; “Native American” refers to an individual having origins in any of the original peoples of North America or of Hawai’i. Businesses owned by members of these groups are collectively referred to as M/WBEs.

E. VOB and SDVOB Availability in the City of Austin’s Market Area

Chapter III estimates the percentage of establishments in the City of Austin’s relevant market area that are owned by veterans and service-disabled veterans. For each industry category, VOB and SDVOB availability was defined as the number of VOBs and SDVOBs divided by the total number of business establishments in the relevant contracting market area, weighted by the dollars attributable to each detailed industry. Determining the total number of establishments in

the relevant market is more straightforward than determining the number of VOB and SDVOB establishments in those markets. The latter task has three main parts: (1) identifying all listed VOBs and SDVOBs in the relevant market; (2) verifying the ownership status of listed VOBs and SDVOBs; and (3) estimating the number of unlisted VOBs and SDVOBs in the relevant market.

Table A2 below provides an executive level summary of the current M/WBE availability estimates derived in the Study. Availability estimates for more detailed industries within the major procurement categories appear in Tables 3.12A through 3.15A.

Table A2. Overall Estimated VOB and SDVOB Availability Percentages in the City of Austin Market Area

	Veteran	Service-Disabled Veteran
OVERALL		
AWARD DOLLARS	7.36	1.77
PAID DOLLARS	6.96	1.53
CONSTRUCTION		
AWARD DOLLARS	5.80	1.10
PAID DOLLARS	5.74	1.07
PROFESSIONAL SERVICES		
AWARD DOLLARS	9.46	1.85
PAID DOLLARS	9.35	1.74
NONPROFESSIONAL SERVICES		
AWARD DOLLARS	7.23	1.83
PAID DOLLARS	6.39	1.24
COMMODITIES		
AWARD DOLLARS	6.29	2.30
PAID DOLLARS	6.45	2.46

Sources and Notes: Table 3.11.

F. Statistical Disparities in Business Formation and Business Owner Earnings

1. Minorities and Women

Chapter III demonstrates that current M/WBE availability levels in the City of Austin's market area, as measured in Chapter II, are substantially lower in most instances than those that we would expect to observe if commercial markets operated in a race- and gender-neutral manner

and that these levels are statistically significant.²² In other words, minorities and women are substantially and significantly less likely to own their own businesses as the result of discrimination than would be expected based upon their observable characteristics, including age, education, geographic location and industry. We find that these groups also suffer substantial and significant earnings disadvantages relative to comparable nonminority males, whether they work as employees or entrepreneurs.

For example, we found that annual average wages for African Americans in 2009–2013 in the construction sector were 59.5 percent lower in the City of Austin market area than for nonminority males who were otherwise similar in terms of geographic location, industry, age and education (see Table 4.2). This difference is large and statistically significant. Large, adverse, and statistically significant wage disparities were also observed for Hispanics (30.0 percent lower), Asians/Pacific Islanders (14.0 percent lower), Native Americans (34.6 percent lower), persons reporting two or more races (23.4 percent lower) and nonminority women (31.6 percent lower). These disparities are consistent with the presence of market-wide discrimination. Comparable results were observed when the analysis was restricted to the goods and services sector or expanded to the economy as a whole. That is, large, adverse, and statistically significant wage disparities were observed for all minority groups and for nonminority women. All wage and salary disparity analyses were then repeated to test whether observed disparities in the City of Austin market area were different enough from elsewhere in the country or the economy to alter any of the basic conclusions regarding wage and salary disparities. They were not. Indeed, for African Americans and Hispanics in the Austin market area, wages relative to nonminority males were significantly lower than in the country as a whole.

This analysis demonstrates that minorities and women earn substantially and significantly less than their nonminority male counterparts. Such disparities are consistent with race and gender discrimination in the labor force that, in addition to its direct effect on workers, reduces the future availability of M/WBEs by stifling opportunities for minorities and women to progress through precisely those internal labor markets and occupational hierarchies that are most likely to lead to entrepreneurial opportunities. These disparities reflect more than mere “societal discrimination” because they demonstrate the nexus between discrimination in the job market and reduced entrepreneurial opportunities for minorities and women. Other things equal, these reduced entrepreneurial opportunities in turn lead to lower M/WBE availability levels than would be observed in a race- and gender-neutral market area.

Next, we analyzed race and gender disparities in business owner earnings. We found, for example, that annual earnings for self-employed African Americans in 2009–2013 in the construction sector were 41.1 percent lower in the City of Austin market area than for nonminority males who were otherwise similar in terms of geographic location, industry, age and education (see Table 4.5). This difference is large and statistically significant. Large, adverse, and statistically significant wage disparities were also observed for Hispanics (15.7 percent lower), Asians/Pacific Islanders (19.9 percent lower), Native Americans (32.8 percent lower), persons reporting two or more races (25.8 percent lower) and nonminority women (40.8 percent

²² Typically, for a given disparity statistic to be considered “statistically significant” there must be a substantial probability that the value of that statistic is unlikely to be due to chance alone. *See also fn.* 81.

lower). These disparities are consistent with the presence of market-wide discrimination. Similar results were observed when the analysis was restricted to the goods and services sector or expanded to the economy as a whole. As with the wage and salary disparity analysis, we enhanced our basic statistical model to test whether minority and female business owners in the City of Austin market area differed significantly enough from business owners elsewhere in the U.S. economy to alter any of our basic conclusions regarding disparity. They did not.

As was the case for wage and salary earners, minority and female entrepreneurs earned substantially and significantly less from their efforts than similarly situated nonminority male entrepreneurs. These disparities are a symptom of discrimination in commercial markets that directly and adversely affect M/WBEs. Other things equal, if minorities and women cannot earn remuneration from their entrepreneurial efforts comparable to that of nonminority males, growth rates will slow, business failure rates will increase, and business formation rates may decrease. Combined, these phenomena result in lower M/WBE availability levels than would otherwise be observed in a race- and gender-neutral market area.

Next, we analyzed race and gender disparities in business formation (see Tables 4.7 to 4.11). As with earnings, in most cases we observed large, adverse, and statistically significant disparities consistent with the presence of discrimination in these markets in the overall economy, in the construction sector and in the goods and services sector. In the construction sector (Table 4.10), business formation rates for African Americans were 8.6 percentage points lower than for comparable nonminority males. Large, adverse, and statistically significant reductions in business formation were also observed for Hispanics (11.8 percentage points lower), Asians/Pacific Islanders (5.3 percentage points lower), persons reporting two or more races (2.5 percentage points lower) and nonminority women (10.4 percentage points lower).

In the goods and services sector (Table 4.11), business formation rates for African Americans were 5.4 percentage points lower than for comparable nonminority males. Large, adverse, and statistically significant reductions in business formation were also observed for Hispanics (4.3 percentage points lower), Asians/Pacific Islanders (3.3 percentage points lower), Native Americans (3.6 percentage points lower), and nonminority women (2.0 percentage points lower).

In the economy as a whole (Table 4.9), business formation rates for African Americans were 4.0 percentage points lower than for comparable nonminority males. Large, adverse, and statistically significant reductions in business formation were also observed for Hispanics (3.3 percentage points lower), Asians/Pacific Islanders (3.0 percentage points lower), persons reporting two or more races (1.6 percentage points lower) and nonminority women (2.9 percentage points lower).

2. Veterans and Service-Disabled Veterans

Adverse wage disparities were observed for VOBs and SDVOBs in the economy as whole, in the construction sector, and in the goods and services sector. These wage disparities, however, were substantially smaller than those observed for M/WBEs overall.

Adverse business owner earnings disparities were observed for VOBs and SDVOBS in the economy as whole, in the construction sector, and in the goods and services sector. Although these disparities were generally smaller than those observed for M/WBEs overall, they were

substantially larger than what was observed for VOBs and SDVOBs in the wage and salary earnings analysis, consistent with the operation of discrimination against these two groups of business owners.

Large, adverse and statistically significant business formation disparities were observed for VOBs and SDVOBs in the construction sector, in the goods and services sector, and for veterans, in the economy as a whole. These disparities are consistent with the operation of discrimination against these two groups of veteran business owners.

3. Census Bureau's Survey of Business Owners

As a further check on the statistical findings in this chapter, we examined evidence from the Census Bureau's *Survey of Business Owners and Self-Employed Persons* (SBO) (see Tables 4.13 to 4.18). These data show large, adverse, and statistically significant disparities between M/WBEs' share of overall revenues and their share of overall firms in the U.S. as a whole, and in the State of Texas.²³ The size of the disparities facing minority-owned firms in Texas is very large. For example, although 7.3 percent of all firms in Texas are owned by African Americans, these firms earned less than 1.1 percent of all sales and receipts. Hispanic-owned firms are 21.2 percent of all firms in Texas, yet they earned only 7.2 percent of all sales and receipts. Asian-owned firms are 5.4 percent of all firms in Texas, but earned only 4.7 percent of sales and receipts. Native American-owned firms are 0.90 percent of all firms in Texas, but earned only 0.43 percent of sales and receipts. Women-owned firms were 28.9 percent of all firms in Texas, but these firms earned only 11.3 percent of sales and receipts. In contrast, 9.5 percent of firms in Texas were owned by veterans, and these firms earned 11.1 percent of all sales and receipts.

G. Statistical Disparities in Credit/Capital Markets

In Chapter V, we analyzed historical data from the Survey of Small Business Finances ("SSBF"), conducted by the Federal Reserve Board and the U.S. Small Business Administration covering 1993-2003, and more limited data from: (a) nine surveys mirroring the SSBF that NERA conducted throughout the nation between 1999 and 2007, and (b) 2007-2010 data compiled from the Kauffman Firm Survey, to examine whether discrimination exists in the market for small business credit and capital.

Credit market discrimination can have an important effect on the likelihood that M/WBEs will succeed. Moreover, discrimination in the credit market might even prevent such businesses from opening in the first place. This analysis has been held by some courts to be probative of a public entity's compelling interest in remedying discrimination.²⁴ We provide qualitative and quantitative evidence supporting the view that M/WBE firms, particularly African American-owned firms, suffer discrimination in this market.

²³ In general, with this particular dataset, it is not possible to analyze geographies below the state level.

²⁴ See, e.g., *Northern Contracting, Inc. v. Illinois Department of Transportation*, No. 00-C-4515, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005); *Concrete Works of Colorado v. City and County of Denver*, 321 F.3d 950, cert. denied, (10th Cir. 2003).

The SSBF datasets are constructed for the nation as a whole and for nine Census divisions. The City of Austin market area is part of the West South Central division (WSC), that includes the State of Texas and three surrounding states.²⁵ To render the results as narrowly tailored as possible, we included indicator variables in our statistical analyses to determine whether the results for the WSC were different from those for the nation as a whole. We determined that the national results also apply in general to the WSC.

The main results are as follows:

- Minority-owned firms were more likely to report that they did not apply for a loan over the preceding three years because they feared the loan would be denied (see Tables 5.15, 5.22, 5.29).
- When minority-owned firms applied for a loan, their loan requests were substantially more likely to be denied than non-minorities, even after accounting for differences like firm size and credit history (see Tables 5.8, 5.9, 5.18, 5.19, 5.25, 5.26).
- When minority-owned firms did receive a loan they were obligated to pay higher interest rates on the loans than comparable nonminority-owned firms (see Tables 5.13, 5.14, 5.21, 5.27).
- A larger proportion of minority-owned firms than nonminority-owned firms report that credit market conditions are a serious concern (see Tables 5.3, 5.4, 5.5, 5.6, 5.7, 5.17, 5.24).
- A larger share of minority-owned firms than nonminority-owned firms believes that the availability of credit is the most important issue likely to confront them in the upcoming year (see Tables 5.5, 5.6).
- There is no evidence that discrimination in the market for credit is significantly different in the WSC, which includes the City of Austin market area, or in the construction and construction-related professional services industries than it is in the nation or the economy as a whole (various tables). The evidence from NERA's own credit surveys in a variety of states and metropolitan areas across the country is entirely consistent with the results from the SSBF.
- There is no evidence that the level of discrimination in the market for credit has diminished between 1993 and 2003, between 1999-2007, or in more recent years (various tables).

We conclude that there is evidence of discrimination against M/WBEs in the City of Austin market area in the small business credit market. This discrimination is particularly acute for African American-owned small businesses where, even after adjusting for differences in assets, liabilities, and creditworthiness, the loan denial rates remain substantially higher than for nonminority male-owned small businesses.

²⁵ The WSC includes Texas as well as Arkansas, Louisiana and Oklahoma.

H. Public Sector Utilization vs. Availability in City of Austin Contracting and Purchasing Markets, 2008–2013

Chapter VI analyzes the extent to which M/WBEs were utilized on contracts active at the City of Austin during 2008-2013 and compares this utilization rate to the availability of M/WBEs in the relevant market area.

Tables B1–B6 provide an executive summary of the utilization findings for the Study by industry category and M/WBE type. Table B1 shows M/WBE and non-M/WBE utilization measured by dollars awarded for all contracts and purchases examined during the study period. Table B2 shows comparable M/WBE and non-M/WBE utilization measured by dollars paid.

Table B3 shows M/WBE utilization, measured by dollars awarded, for contracts on which M/WBE goals *were* established, while Table B4 shows comparable information for contracts on which M/WBE goals were *not* established.

Table B5 shows M/WBE utilization, measured by dollars paid, for contracts on which M/WBE goals *were* established, while Table B6 shows comparable information for contracts on which M/WBE goals were *not* established.

Table B1. M/WBE Utilization in Contracting at the City of Austin–All Contracts (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.67	3.24	1.88	1.11	1.82
Hispanic	13.73	11.60	3.27	6.09	8.01
Asian/Pacific Islander	1.64	5.66	2.92	0.31	2.30
Native American	0.03	0.02	0.10	0.21	0.09
Minority Total	17.07	20.53	8.17	7.72	12.23
Nonminority female	6.68	10.90	5.49	2.76	5.90
M/WBE Total	23.76	31.43	13.66	10.48	18.13
Non-M/WBE Total	76.24	68.57	86.34	89.52	81.87
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,418,347,835	643,671,866	1,729,836,803	1,151,098,221	4,942,954,725
Total Prime Contracts	475	479	1,440	1,540	3,934
Total Subcontracts	4,820	2,693	2,020	0	9,533

Source and Notes: Table 6.1.

Table B2. M/WBE Utilization in Contracting at the City of Austin–All Contracts (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.49	3.70	1.91	1.19	1.84
Hispanic	15.30	12.63	3.51	5.54	8.61
Asian/Pacific Islander	1.62	5.63	3.04	0.26	2.27
Native American	0.03	0.02	0.13	0.16	0.09
Minority Total	18.44	21.98	8.58	7.15	12.81
Nonminority female	6.52	11.37	5.45	3.10	5.94
M/WBE Total	24.95	33.35	14.03	10.24	18.75
Non-M/WBE Total	75.05	66.65	85.97	89.76	81.25
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,230,402,467	538,903,507	1,412,133,147	1,038,323,711	4,219,762,832
Total Prime Contracts	441	405	1,306	1,381	3,533
Total Subcontracts	4,451	2,306	1,754	0	8,511

Source: Table 6.2.

Table B3. M/WBE Utilization in Contracting at the City of Austin—Contracts with M/WBE Goals (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.89	3.75	2.93	0.00	2.19
Hispanic	15.50	12.82	8.89	9.76	14.58
Asian/Pacific Islander	1.69	9.28	4.89	0.00	2.91
Native American	0.03	0.07	0.00	0.00	0.03
Minority Total	19.11	25.92	16.71	9.76	19.72
Nonminority female	7.87	16.26	5.14	0.00	8.68
M/WBE Total	26.99	42.18	21.85	9.76	28.40
Non-M/WBE Total	73.01	57.82	78.15	90.24	71.60
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	961,240,680	159,962,657	95,180,739	11,918,012	1,228,302,089
Total Contracts	309	151	26	8	494
Total Subcontracts	3,949	896	265	0	5,110

Source: Table 6.3.

Table B4. M/WBE Utilization in Contracting at the City of Austin—Contracts without M/WBE Goals (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.21	3.08	1.82	1.12	1.69
Hispanic	10.01	11.20	2.94	6.06	5.84
Asian/Pacific Islander	1.54	4.47	2.80	0.31	2.10
Native American	0.02	0.00	0.11	0.21	0.12
Minority Total	12.78	18.74	7.67	7.70	9.75
Nonminority female	4.18	9.13	5.51	2.79	4.98
M/WBE Total	16.96	27.87	13.18	10.49	14.73
Non-M/WBE Total	83.04	72.13	86.82	89.51	85.27
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	457,107,154	483,709,209	1,634,656,065	1,139,180,208	3,714,652,636
Total Contracts	166	328	1,414	1,532	3,440
Total Subcontracts	871	1,797	1,755	0	4,423

Source: Table 6.4.

Table B5. M/WBE Utilization in Contracting at the City of Austin—Contracts with M/WBE Goals (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.66	4.02	2.30	0.00	1.99
Hispanic	16.55	13.87	9.14	9.85	15.55
Asian/Pacific Islander	1.72	9.55	3.90	0.00	2.88
Native American	0.03	0.07	0.00	0.00	0.03
Minority Total	19.97	27.52	15.34	9.85	20.46
Nonminority female	7.58	16.00	5.09	0.00	8.38
M/WBE Total	27.54	43.51	20.43	9.85	28.84
Non-M/WBE Total	72.46	56.49	79.57	90.15	71.16
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	822,053,563	135,349,268	82,718,827	11,814,459	1,051,936,118
Total Contracts	284	124	23	8	439
Total Subcontracts	3,647	748	237	0	4,632

Source: Table 6.5.

Table B6. M/WBE Utilization in Contracting at the City of Austin—Contracts without M/WBE Goals (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.15	3.59	1.88	1.20	1.79
Hispanic	12.77	12.21	3.16	5.49	6.30
Asian/Pacific Islander	1.40	4.32	2.98	0.26	2.07
Native American	0.03	0.00	0.13	0.16	0.11
Minority Total	15.35	20.12	8.16	7.11	10.27
Nonminority female	4.38	9.82	5.47	3.13	5.13
M/WBE Total	19.73	29.94	13.63	10.25	15.40
Non-M/WBE Total	80.27	70.06	86.37	89.75	84.60
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	408,348,903	403,554,238	1,329,414,320	1,026,509,252	3,167,826,713
Total Contracts	157	281	1,283	1,373	3,094
Total Subcontracts	804	1,558	1,517	0	3,879

Source: Table 6.6.

Next, we compared the use of M/WBEs on all City of Austin contracts and subcontracts from the study period to our measure of M/WBE availability in the relevant market area. If M/WBE utilization is lower than measured availability in a given category, we report this result as a disparity.

Table C1, on the following page, provides a top-level summary of our disparity findings for the Study for each major procurement category using dollars awarded. Table C2 provides comparable results using dollars paid.

Tables C3 and C4 show comparable information for those contracts on which M/WBE goals were established, while Tables C5 and C6 show comparable information for those contracts on which no M/WBE goals were established.

Table C1. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category–All Contracts (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.82	2.74	66.36 *
Hispanic	8.01	8.87	90.35
Asian/Pacific Islander	2.30	2.33	98.98
Native American	0.09	0.39	24.24 ****
Minority-owned	12.23	14.32	85.36
Nonminority female	5.90	10.87	54.27 ****
M/WBE total	18.13	25.20	71.95 ****
CONSTRUCTION			
African American	1.67	2.27	73.40
Hispanic	13.73	10.94	
Asian/Pacific Islander	1.64	1.14	
Native American	0.03	0.56	4.92 ****
Minority-owned	17.07	14.92	
Nonminority female	6.68	9.61	69.57 ****
M/WBE total	23.76	24.53	96.85
PROFESSIONAL SERVICES			
African American	3.24	1.60	
Hispanic	11.60	7.18	
Asian/Pacific Islander	5.66	2.81	
Native American	0.02	0.38	4.46 ****
Minority-owned	20.53	11.97	
Nonminority female	10.90	6.93	
M/WBE total	31.43	18.90	
NONPROFESSIONAL SERVICES			
African American	1.88	3.91	47.98 ****
Hispanic	3.27	8.95	36.51 ****
Asian/Pacific Islander	2.92	2.40	
Native American	0.10	0.30	34.91
Minority-owned	8.17	15.56	52.49 ****
Nonminority female	5.49	14.39	38.15 ****
M/WBE total	13.66	29.95	45.60 ****
COMMODITIES			
African American	1.11	1.74	63.83
Hispanic	6.09	8.28	73.62 ***
Asian/Pacific Islander	0.31	3.13	9.83 ****
Native American	0.21	0.42	49.39
Minority-owned	7.72	13.57	56.88 ****
Nonminority female	2.76	9.03	30.57 ****
M/WBE total	10.48	22.60	46.37 ****

Source: Table 6.8.

Notes: (1) “*” indicates an adverse disparity that is statistically significant at the 15% level or better (85% confidence). “***” indicates an adverse disparity that is statistically significant at the 10% level or better (90% confidence). “****” indicates the disparity is significant at a 5% level or better (95% confidence). “*****” indicates significance at a 1% level or better (99% confidence). (2) An empty cell in the Disparity Ratio column indicates that no adverse disparity was observed for that category.

Table C2. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category–All Contracts (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.84	2.91	63.05 **
Hispanic	8.61	9.10	94.63
Asian/Pacific Islander	2.27	2.37	95.72
Native American	0.09	0.39	23.74 ****
Minority-owned	12.81	14.78	86.70
Nonminority female	5.94	11.20	53.01 ****
M/WBE total	18.75	25.98	72.17 ****
CONSTRUCTION			
African American	1.49	2.30	64.74 *
Hispanic	15.30	10.80	
Asian/Pacific Islander	1.62	1.11	
Native American	0.03	0.59	5.25 ****
Minority-owned	18.44	14.80	
Nonminority female	6.52	9.56	68.19 ****
M/WBE total	24.95	24.35	
PROFESSIONAL SERVICES			
African American	3.70	1.64	
Hispanic	12.63	7.54	
Asian/Pacific Islander	5.63	2.90	
Native American	0.02	0.40	4.60 ****
Minority-owned	21.98	12.49	
Nonminority female	11.37	6.74	
M/WBE total	33.35	19.22	
NONPROFESSIONAL SERVICES			
African American	1.91	4.33	44.08 ****
Hispanic	3.51	9.40	37.30 ****
Asian/Pacific Islander	3.04	2.50	
Native American	0.13	0.25	49.74
Minority-owned	8.58	16.49	52.02 ****
Nonminority female	5.45	15.48	35.23 ****
M/WBE total	14.03	31.96	43.89 ****
COMMODITIES			
African American	1.19	1.89	62.74 *
Hispanic	5.54	8.16	67.88 ***
Asian/Pacific Islander	0.26	3.16	8.26 ****
Native American	0.16	0.47	34.18 **
Minority-owned	7.15	13.68	52.24 ****
Nonminority female	3.10	9.20	33.66 ****
M/WBE total	10.24	22.88	44.77 ****

Source: Table 6.9.

Table C3. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category—Contracts with M/WBE Goals (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	2.19	2.74	80.13
Hispanic	14.58	8.87	
Asian/Pacific Islander	2.91	2.33	
Native American	0.03	0.39	8.22 ****
Minority-owned	19.72	14.32	
Nonminority female	8.68	10.87	79.82
M/WBE total	28.40	25.20	
CONSTRUCTION			
African American	1.89	2.27	83.07
Hispanic	15.50	10.94	
Asian/Pacific Islander	1.69	1.14	
Native American	0.03	0.56	5.27 ****
Minority-owned	19.11	14.92	
Nonminority female	7.87	9.61	81.97
M/WBE total	26.99	24.53	
PROFESSIONAL SERVICES			
African American	3.75	1.60	
Hispanic	12.82	7.18	
Asian/Pacific Islander	9.28	2.81	
Native American	0.07	0.38	17.96 ***
Minority-owned	25.92	11.97	
Nonminority female	16.26	6.93	
M/WBE total	42.18	18.90	
NONPROFESSIONAL SERVICES			
African American	2.93	3.91	74.94
Hispanic	8.89	8.95	99.27
Asian/Pacific Islander	4.89	2.40	
Native American	0.00	0.30	0.00 ****
Minority-owned	16.71	15.56	
Nonminority female	5.14	14.39	35.70 ****
M/WBE total	21.85	29.95	72.96 ****
COMMODITIES			
African American	0.00	1.74	0.00 ****
Hispanic	9.76	8.28	
Asian/Pacific Islander	0.00	3.13	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority-owned	9.76	13.57	71.94 **
Nonminority female	0.00	9.03	0.00 ****
M/WBE total	9.76	22.60	43.19 ****

Source: Table 6.10.

Table C4. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category–Contracts with M/WBE Goals (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.99	2.91	68.43
Hispanic	15.55	9.10	
Asian/Pacific Islander	2.88	2.37	
Native American	0.03	0.39	8.82 ****
Minority-owned	20.46	14.78	
Nonminority female	8.38	11.20	74.79
M/WBE total	28.84	25.98	
CONSTRUCTION			
African American	1.66	2.30	72.03
Hispanic	16.55	10.80	
Asian/Pacific Islander	1.72	1.11	
Native American	0.03	0.59	5.47 ****
Minority-owned	19.97	14.80	
Nonminority female	7.58	9.56	79.29
M/WBE total	27.54	24.35	
PROFESSIONAL SERVICES			
African American	4.02	1.64	
Hispanic	13.87	7.54	
Asian/Pacific Islander	9.55	2.90	
Native American	0.07	0.40	18.30 **
Minority-owned	27.52	12.49	
Nonminority female	16.00	6.74	
M/WBE total	43.51	19.22	
NONPROFESSIONAL SERVICES			
African American	2.30	4.33	53.06 ***
Hispanic	9.14	9.40	97.23
Asian/Pacific Islander	3.90	2.50	
Native American	0.00	0.25	0.00 ****
Minority-owned	15.34	16.49	93.02
Nonminority female	5.09	15.48	32.88 ****
M/WBE total	20.43	31.96	63.90 ****
COMMODITIES			
African American	0.00	1.89	0.00 ****
Hispanic	9.85	8.16	
Asian/Pacific Islander	0.00	3.16	0.00 ****
Native American	0.00	0.47	0.00 ****
Minority-owned	9.85	13.68	71.97 **
Nonminority female	0.00	9.20	0.00 ****
M/WBE total	9.85	22.88	43.03 ****

Source: Table 6.11.

Table C5. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category—Contracts without M/WBE Goals (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.69	2.74	61.81 *
Hispanic	5.84	8.87	65.86 ***
Asian/Pacific Islander	2.10	2.33	90.29
Native American	0.12	0.39	29.53 **
Minority-owned	9.75	14.32	68.06 ****
Nonminority female	4.98	10.87	45.83 ****
M/WBE total	14.73	25.20	58.47 ****
CONSTRUCTION			
African American	1.21	2.27	53.08 **
Hispanic	10.01	10.94	91.48
Asian/Pacific Islander	1.54	1.14	
Native American	0.02	0.56	4.19 ****
Minority-owned	12.78	14.92	85.66
Nonminority female	4.18	9.61	43.51 ****
M/WBE total	16.96	24.53	69.15 ****
PROFESSIONAL SERVICES			
African American	3.08	1.60	
Hispanic	11.20	7.18	
Asian/Pacific Islander	4.47	2.81	
Native American	0.00	0.38	0.00 ****
Minority-owned	18.74	11.97	
Nonminority female	9.13	6.93	
M/WBE total	27.87	18.90	
NONPROFESSIONAL SERVICES			
African American	1.82	3.91	46.42 ****
Hispanic	2.94	8.95	32.86 ****
Asian/Pacific Islander	2.80	2.40	
Native American	0.11	0.30	36.94
Minority-owned	7.67	15.56	49.29 ****
Nonminority female	5.51	14.39	38.29 ****
M/WBE total	13.18	29.95	44.00 ****
COMMODITIES			
African American	1.12	1.74	64.49
Hispanic	6.06	8.28	73.15 *
Asian/Pacific Islander	0.31	3.13	9.93 ****
Native American	0.21	0.42	49.91
Minority-owned	7.70	13.57	56.72 ****
Nonminority female	2.79	9.03	30.89 ****
M/WBE total	10.49	22.60	46.40 ****

Source: Table 6.12.

Table C6. Utilization, Availability and Disparity Results for the City of Austin Contracting, Overall and by Contracting Category—Contracts without M/WBE Goals (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.79	2.91	61.26 *
Hispanic	6.30	9.10	69.29 ***
Asian/Pacific Islander	2.07	2.37	87.18
Native American	0.11	0.39	28.69 **
Minority-owned	10.27	14.78	69.51 *****
Nonminority female	5.13	11.20	45.78 *****
M/WBE total	15.40	25.98	59.27 *****
CONSTRUCTION			
African American	1.15	2.30	50.06 ***
Hispanic	12.77	10.80	
Asian/Pacific Islander	1.40	1.11	
Native American	0.03	0.59	4.81 *****
Minority-owned	15.35	14.80	
Nonminority female	4.38	9.56	45.84 *****
M/WBE total	19.73	24.35	81.02 ***
PROFESSIONAL SERVICES			
African American	3.59	1.64	
Hispanic	12.21	7.54	
Asian/Pacific Islander	4.32	2.90	
Native American	0.00	0.40	0.00 *****
Minority-owned	20.12	12.49	
Nonminority female	9.82	6.74	
M/WBE total	29.94	19.22	
NONPROFESSIONAL SERVICES			
African American	1.88	4.33	43.52 *****
Hispanic	3.16	9.40	33.58 *****
Asian/Pacific Islander	2.98	2.50	
Native American	0.13	0.25	52.84
Minority-owned	8.16	16.49	49.47 *****
Nonminority female	5.47	15.48	35.37 *****
M/WBE total	13.63	31.96	42.65 *****
COMMODITIES			
African American	1.20	1.89	63.46
Hispanic	5.49	8.16	67.27 ***
Asian/Pacific Islander	0.26	3.16	8.35 *****
Native American	0.16	0.47	34.57 *
Minority-owned	7.11	13.68	52.01 *****
Nonminority female	3.13	9.20	34.05 *****
M/WBE total	10.25	22.88	44.79 *****

Source: Table 6.13.

Tables D1 and D2 provide an executive summary of the utilization findings for the Study by industry category and M/WBE type restricted to prime contracts. Table D1 shows M/WBE and non-M/WBE utilization measured by dollars awarded for all prime contracts examined during the study period. Table D2 shows comparable M/WBE and non-M/WBE utilization for prime contracts measured by dollars paid.

Table D1. M/WBE Utilization at the City of Austin—Prime Contracts (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	0.12	0.74	0.94	1.11	0.72
Hispanic	9.74	4.80	2.29	6.09	5.64
Asian/Pacific Islander	1.07	3.15	2.66	0.31	1.72
Native American	0.00	0.02	0.11	0.21	0.09
Minority Total	10.93	8.71	6.00	7.72	8.17
Nonminority female	3.79	5.55	4.63	2.76	4.08
M/WBE Total	14.72	14.26	10.64	10.48	12.25
Non-M/WBE Total	85.28	85.74	89.36	89.52	87.75
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,418,347,835	643,671,866	1,729,836,803	1,151,098,221	4,942,954,725
Total Prime Contracts	475	479	1,440	1,540	3,934

Source: Table 6.14.

Table D2. M/WBE Utilization at the City of Austin—Prime Contracts (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	0.11	0.78	0.91	1.19	0.73
Hispanic	9.42	5.48	2.54	5.54	5.66
Asian/Pacific Islander	0.89	3.03	2.81	0.26	1.65
Native American	0.00	0.02	0.13	0.16	0.08
Minority Total	10.43	9.31	6.39	7.15	8.13
Nonminority female	3.37	5.53	4.83	3.10	4.07
M/WBE Total	13.79	14.84	11.23	10.24	12.20
Non-M/WBE Total	86.21	85.16	88.77	89.76	87.80
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,230,402,467	538,903,507	1,412,133,147	1,038,323,711	4,219,762,832
Total Prime Contracts	441	405	1,306	1,381	3,533

Source: Table 6.15.

Next, we compared the use of M/WBEs on City of Austin prime contracts from the study period to our measure of M/WBE availability in the relevant market area. If M/WBE utilization is lower than measured availability in a given category, we report this result as a disparity.

On the following page, Table E1 provides a top-level summary of our disparity findings for the Study for prime contracts in each major procurement category using dollars awarded. Table E2 provides comparable results using dollars paid.

Table E1. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–Prime Contracts (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	0.72	2.74	26.20 ****
Hispanic	5.64	8.87	63.59 ****
Asian/Pacific Islander	1.72	2.33	74.03
Native American	0.09	0.39	22.92 ***
Minority-owned	8.17	14.32	57.03 ****
Nonminority female	4.08	10.87	37.49 ****
M/WBE total	12.25	25.20	48.60 ****
CONSTRUCTION			
African American	0.12	2.27	5.42 ****
Hispanic	9.74	10.94	88.96
Asian/Pacific Islander	1.07	1.14	93.62
Native American	0.00	0.56	0.00 ****
Minority-owned	10.93	14.92	73.25 ***
Nonminority female	3.79	9.61	39.49 ****
M/WBE total	14.72	24.53	60.03 ****
PROFESSIONAL SERVICES			
African American	0.74	1.60	46.13 ***
Hispanic	4.80	7.18	66.89 ***
Asian/Pacific Islander	3.15	2.81	
Native American	0.02	0.38	4.45 ****
Minority-owned	8.71	11.97	72.73 ***
Nonminority female	5.55	6.93	80.17
M/WBE total	14.26	18.90	75.46 ***
NONPROFESSIONAL SERVICES			
African American	0.94	3.91	23.93 ****
Hispanic	2.29	8.95	25.61 ****
Asian/Pacific Islander	2.66	2.40	
Native American	0.11	0.30	37.57
Minority-owned	6.00	15.56	38.60 ****
Nonminority female	4.63	14.39	32.20 ****
M/WBE total	10.64	29.95	35.52 ****
COMMODITIES			
African American	1.11	1.74	63.83
Hispanic	6.09	8.28	73.62 *
Asian/Pacific Islander	0.31	3.13	9.83 ****
Native American	0.21	0.42	49.39
Minority-owned	7.72	13.57	56.88 ****
Nonminority female	2.76	9.03	30.57 ****
M/WBE total	10.48	22.60	46.37 ****

Source: Table 6.16.

Table E2. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–Prime Contracts (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	0.73	2.91	25.10 ****
Hispanic	5.66	9.10	62.22 ****
Asian/Pacific Islander	1.65	2.37	69.61
Native American	0.08	0.39	21.46 ***
Minority-owned	8.13	14.78	55.01 ****
Nonminority female	4.07	11.20	36.31 ****
M/WBE total	12.20	25.98	46.95 ****
CONSTRUCTION			
African American	0.11	2.30	4.91 ****
Hispanic	9.42	10.80	87.26
Asian/Pacific Islander	0.89	1.11	80.24
Native American	0.00	0.59	0.00 ****
Minority-owned	10.43	14.80	70.47 ****
Nonminority female	3.37	9.56	35.23 ****
M/WBE total	13.79	24.35	56.64 ****
PROFESSIONAL SERVICES			
African American	0.78	1.64	47.69 **
Hispanic	5.48	7.54	72.73 **
Asian/Pacific Islander	3.03	2.90	
Native American	0.02	0.40	5.08 ****
Minority-owned	9.31	12.49	74.58 ***
Nonminority female	5.53	6.74	82.07
M/WBE total	14.84	19.22	77.20 ***
NONPROFESSIONAL SERVICES			
African American	0.91	4.33	21.15 ****
Hispanic	2.54	9.40	27.02 ****
Asian/Pacific Islander	2.81	2.50	
Native American	0.13	0.25	49.51
Minority-owned	6.39	16.49	38.79 ****
Nonminority female	4.83	15.48	31.24 ****
M/WBE total	11.23	31.96	35.13 ****
COMMODITIES			
African American	1.19	1.89	62.74
Hispanic	5.54	8.16	67.88 ***
Asian/Pacific Islander	0.26	3.16	8.26 ****
Native American	0.16	0.47	34.18
Minority-owned	7.15	13.68	52.24 ****
Nonminority female	3.10	9.20	33.66 ****
M/WBE total	10.24	22.88	44.77 ****

Source: Table 6.17.

Next, Chapter VI analyzes the extent to which VOBs and SDVOBs were utilized on contracts active at the City of Austin during 2008-2013, and compares this utilization rate to the availability of VOBs and SDVOBs in the relevant market area.

Tables F1 and F2 summarize these utilization findings by industry category. Table F1 shows VOB and SDVOB utilization measured by dollars awarded. Table F2 shows comparable M/WBE and VOB and SDVOB utilization measured by dollars paid.²⁶

Table F1. VOB and SDVOB Utilization at the City of Austin—All Contracts (Dollars Awarded)

Veteran Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
VOB	0.94	0.32	1.24	2.18	1.30
SDVOB	0.03	0.00	0.22	0.31	0.17
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	523,285,190	292,819,270	656,319,346	579,340,061	2,051,763,867
Total Prime Contracts	214	269	719	691	1,893
Total Subcontracts	2,950	1,777	996	0	5,723

Source: Table 6.18.

Table F2. VOB and SDVOB Utilization at the City of Austin—All Contracts (Dollars Paid)

Veteran Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
VOB	0.65	0.32	1.35	2.31	1.30
SDVOB	0.01	0.00	0.31	0.35	0.20
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	455,450,962	255,684,205	464,921,518	508,602,199	1,684,658,885
Total Prime Contracts	199	231	639	615	1,684
Total Subcontracts	2,736	1,518	854	0	5,108

Source: Table 6.19.

²⁶ VOB and SDVOB utilization was measured using a subset of the full master prime and subcontract database for the Study. See fn. 158.

We also compared the use of VOBs and SDVOBs on City of Austin contracts and subcontracts from the study period to our measures of VOB and SDVOB availability in the relevant market area. If VOB or SDVOB utilization is lower than measured availability in a given category, we report this result as a disparity. Table G1 provides a top-level summary of our VOB and SDVOB disparity findings for the Study for each major procurement category using dollars awarded. Table G2 provides comparable results using dollars paid.

Table G.1. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—All Contracts (Dollars Awarded)

Contracting Category & Veteran Type	Utilization	Availability	Disparity Ratio
OVERALL			
Veteran	1.30	7.36	17.7 ****
Service-Disabled Veteran	0.17	1.77	9.4 ****
CONSTRUCTION			
Veteran	0.94	5.80	16.2 ****
Service-Disabled Veteran	0.03	1.10	3.1 ****
PROFESSIONAL SERVICES			
Veteran	0.32	9.46	3.4 ****
Service-Disabled Veteran	0.00	1.85	0.0 ****
NONPROFESSIONAL SERVICES			
Veteran	1.24	7.23	17.2 ****
Service-Disabled Veteran	0.22	1.83	12.2 ****
COMMODITIES			
Veteran	2.18	6.29	34.7 ****
Service-Disabled Veteran	0.31	2.30	13.6 ****

Source: Table 6.20.

Table G.2. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—All Contracts (Dollars Paid)

Contracting Category & Veteran Type	Utilization	Availability	Disparity Ratio
OVERALL			
Veteran	1.30	6.96	18.6 ****
Service-Disabled Veteran	0.20	1.53	12.8 ****
CONSTRUCTION			
Veteran	0.65	5.74	11.3 ****
Service-Disabled Veteran	0.01	1.07	0.9 ****
PROFESSIONAL SERVICES			
Veteran	0.32	9.35	3.5 ****
Service-Disabled Veteran	0.00	1.74	0.0 ****
NONPROFESSIONAL SERVICES			
Veteran	1.35	6.39	21.1 ****
Service-Disabled Veteran	0.31	1.24	25.2 ****
COMMODITIES			
Veteran	2.31	6.45	35.8 ****
Service-Disabled Veteran	0.35	2.46	14.4 ****

Source: Table 6.21.

Finally, Chapter VI compares current levels of M/WBE availability in the City of Austin's market area with what we would expect to observe in a race- and gender-neutral market area. If there is full parity in the relevant market area, then the expected M/WBE availability rate (that is, the M/WBE availability level that would be observed in a non-discriminatory market area) will be equal to the actual current M/WBE availability rate. If there are adverse disparities facing M/WBEs in the market area, however, as documented in Chapters IV, V, VI and VII of this Study, then expected availability will *exceed* current availability. Expected availability percentages for the City's overall contracting and by major contracting category are presented below in Table H. Expected availability exceeds actual current availability in 66 of the 70 cases observed.

Table H. Current Availability and Expected Availability for City of Austin Contracting

Contracting Category & M/WBE Type	Award Dollar Weights		Paid Dollar Weights	
	Current Availability (%)	Expected Availability (%)	Current Availability (%)	Expected Availability (%)
OVERALL				
African American	2.74	4.40	2.91	4.67
Hispanic	8.87	12.41	9.10	12.73
Asian/Pacific Islander	2.33	2.59	2.37	2.64
Native American	0.39	0.40	0.39	0.40
Minority	14.32	19.36	14.78	19.98
Nonminority female	10.87	12.84	11.20	13.23
M/WBE total	25.20	33.87	25.98	34.91
CONSTRUCTION				
African American	2.27	3.25	2.30	3.29
Hispanic	10.94	18.26	10.80	18.02
Asian/Pacific Islander	1.14	1.37	1.11	1.34
Native American	0.56	0.48	0.59	0.50
Minority	14.92	24.43	14.80	24.24
Nonminority female	9.61	14.91	9.56	14.84
M/WBE total	24.53	41.22	24.35	40.92
PROFESSIONAL SERVICES				
African American	1.60	2.29	1.64	2.35
Hispanic	7.18	11.98	7.54	12.58
Asian/Pacific Islander	2.81	3.38	2.90	3.49
Native American	0.38	0.32	0.40	0.34
Minority	11.97	19.60	12.49	20.46
Nonminority female	6.93	10.75	6.74	10.46
M/WBE total	18.90	31.76	19.22	32.30
NONPROFESSIONAL SERVICES				
African American	3.91	7.42	4.33	8.22
Hispanic	8.95	13.58	9.40	14.26
Asian/Pacific Islander	2.40	2.85	2.50	2.97
Native American	0.30	0.42	0.25	0.35
Minority	15.56	21.18	16.49	22.45
Nonminority female	14.39	16.65	15.48	17.91
M/WBE total	29.95	40.06	31.96	42.74
COMMODITIES				
African American	1.74	3.30	1.89	3.59
Hispanic	8.28	12.56	8.16	12.38
Asian/Pacific Islander	3.13	3.72	3.16	3.76
Native American	0.42	0.59	0.47	0.66
Minority	13.57	18.47	13.68	18.62
Nonminority female	9.03	10.45	9.20	10.65
M/WBE total	22.60	30.23	22.88	30.60

Source: Table 6.22.

I. Anecdotal Evidence

Chapter VII presents the results of a large scale mail survey we conducted of M/WBEs and non-M/WBEs about their experiences and difficulties in obtaining contracts. The survey quantified and compared anecdotal evidence on the experiences of M/WBEs and non-M/WBEs as a method to examine whether any differences might be due to discrimination.²⁷

We found that M/WBEs that have been hired in the past by non-M/WBE prime contractors to work on public sector contracts with M/WBE goals are rarely hired—or even solicited—by these prime contractors to work on projects without M/WBE goals. The relative lack of M/WBE hiring and, moreover, the relative lack of solicitation of M/WBEs in the absence of affirmative efforts by the City of Austin and other public entities in the market area shows that business discrimination continues to fetter M/WBE business opportunities in the relevant markets.

We found that M/WBEs in the relevant market area report suffering business-related discrimination in large numbers and with statistically significantly greater frequency than non-M/WBEs. These differences remain statistically significant even when firm size and other “capacity”-related owner characteristics are held constant. Some of the largest disparities were observed in applying for commercial loans, working or attempting to work on private sector prime contracts and subcontracts, receiving timely payment for work performed, and functioning without hindrance or harassment on the work site.

We also found that M/WBEs in these markets are more likely than similarly situated non-M/WBEs to report that specific aspects of the regular business environment make it harder for them to conduct their businesses, and less likely than similarly situated non-M/WBEs to report that specific aspects of the regular business environment make it easier for them to conduct their businesses. In particular, large project sizes, late notice of bid/proposal deadlines, and the cost of bidding or proposing were statistically significantly more difficult for M/WBEs than non-M/WBEs, even when holding firm size and other “capacity”-related owner characteristics constant. Other factors where M/WBEs reported more difficulty than similarly-situated non-M/WBEs included bonding requirements, insurance requirements, previous experience requirements, obtaining working capital, prior dealings with project owners, and the price of supplies or materials.

Chapter VII also presents the results from a series of in-depth personal interviews conducted with almost 200 M/WBE and non-M/WBE business owners and representatives from the City of Austin’s market area. Similar to the survey responses, the interviews strongly suggest that minorities and women continue to suffer discriminatory barriers to full and fair access to City of Austin, other public sector and private sector contracts. Participants reported discriminatory attitudes and negative perceptions and expectations of minorities’ and women’s competence; workplace harassment; not being paid on equal terms; exclusion from industry and information networks; discrimination in access to commercial loans, surety bonds, and insurance; barriers to obtaining public sector contracts; and barriers to obtaining work on private sector contracts and public sector contracts without goals.

²⁷ The survey also examined differences according to VOB and SDVOB status.

We conclude that the statistical evidence presented in this report is consistent with these anecdotal accounts of contemporary business discrimination. The results of the surveys and the personal interviews are the types of anecdotal evidence that, especially in conjunction with the Study's extensive statistical evidence, the courts have found to be highly probative of whether, without affirmative interventions, the City of Austin would be a passive participant in a discriminatory local market area. It is also highly relevant for narrowly tailoring any M/WBE goals that are established.

J. The City of Austin's M/WBE Program: Overview and Feedback Interviews

Austin's Minority-Owned and Women-Owned Business Enterprise Procurement Program adopts race- and gender-conscious goals to provide equal opportunity to all contractors, redress discrimination in the City's marketplace and public contracting and to encourage the participation of M/WBEs in all phases of the City's procurement activities. Austin's policies under this Program are governed by Chapter 2-9A-D of the Austin City Code, Minority and Women's Business Enterprises Procurement Program.

Chapter VIII provides a review of the City of Austin's M/WBE Program and Administrative Regulations, followed by a summary of business owner experiences with these policies and procedures obtained from our interviews. We interviewed almost 200 business owners and representatives, as well as City staff from SMBR, the Contract Management Department, and Austin Energy, to solicit their feedback regarding the Program. Our interviews covered the following subjects:

- Overview of the City's M/WBE Program;
- Annual M/WBE Participation Goals;
- Outreach to M/WBEs and Other Small Businesses;
- Certification Standards and Processes;
- Program Review Procedures;
- Goal-Setting Processes;
- Contract Award Policies and Procedures;
- Contract Performance Policies and Procedures;
- Third-Party Contracts; and
- The Airport Concessions and Disadvantaged Business Enterprise Programs

K. Recommendations for Revised Contracting Policies and Procedures

Finally, in Chapter IX we present the following suggested recommendations for revised contracting policies and procedures, based upon the Study's results and findings and upon our views on best practices for contracting diversity programs.

1. Race- and Gender-Neutral Recommendations

- Increase Efforts to Ensure Prompt Payment on City of Austin Contracts
- Ensure Bidder Non-Discrimination
- Review Surety Bonding, Insurance and Experience Requirements
- Increase Contract Unbundling
- Provide Greater Access to Information for Upcoming Contract Opportunities
- Facilitate Increased Access to Capital
- Adopt a Mentor-Protégé Program
- Continue to Provide Supportive Services for Construction Firms and Expand Supportive Services for Non-Construction Firms
- Implement a Small Local Business Enterprise Program
- Initiate Recordkeeping for Third Party Contracts

2. Race- and Gender-Conscious Remedies

- Adopt a Renewed M/WBE Ordinance and Accompanying Program Regulations
- Tailor the MWBE Ordinance to the Specific Type of Procurement
- Revise Certification Eligibility Standards
 - Adopt a social disadvantage test
 - Adopt an economic disadvantage test
 - Review firm size standards
 - Review the certification period
 - Certification database and outreach

- Consider reciprocal certification opportunities
- Contract Award Policies and Procedures
 - Standardize Good Faith Efforts waiver requirements and related policies
 - Standardize M/WBE Program implementation across City departments
 - Scrutinize Commercially Useful Function and increase contract monitoring
- M/WBE Goal-Setting
 - Adopt annual aspirational M/WBE goals
 - Revise the method for counting M/WBE prime participation towards meeting M/WBE goals
 - Count lower tier M/WBE participation towards meeting M/WBE goals
 - Continue to set contract-specific goals
 - Consider the effects of discrimination on current levels of availability when setting M/WBE goals
- Clarify SMBR Authority
- Review Sanctions Policy
- Continue the M/WBE Program Sunset Review Process

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I. Introduction

The City of Austin commissioned this Study to evaluate whether minority-owned and women-owned business enterprises (“M/WBEs”) in the City’s market area have full and fair opportunities to compete for its prime contracts, purchases and associated subcontracts. The City of Austin additionally asked that we evaluate whether veteran-owned Businesses (“VOBs”) and service-disabled veteran-owned businesses (“SDVOBs”), as well, have such opportunities.

To ensure compliance with constitutional mandates and M/WBE program best practices, the City of Austin commissioned NERA Economic Consulting to examine the past and current status of M/WBEs in its geographic and product markets for contracting and procurement. The results of the Study provide the evidentiary record necessary for the City’s consideration of whether to implement renewed M/WBE policies that comply with the requirements of the courts and to assess the extent to which previous efforts have assisted M/WBEs to compete on a fair basis in the City’s contracting and procurement activity.

This Study finds statistical evidence consistent with the presence of business discrimination against M/WBEs in the private sector of the City of Austin market area. These findings are presented in Chapters IV and V. Statistical analyses of the City’s own contracting and purchasing, which also document evidence consistent with business discrimination, are contained in Chapters II, III and VI. As a check on our statistical findings, documented in Chapter VII, we surveyed the contracting experiences of M/WBEs and non-M/WBEs in the market area and also conducted a series of in-depth personal interviews with business enterprises throughout the market area, both M/WBE and non-M/WBE.

Findings for VOBs and SDVOBs were mixed, with some results consistent with the presence of business discrimination and other results not consistent. These results are discussed, individually, below. In particular, see Chapters III, IV, VI and VII.

The City of Austin has a long record of commitment to including minority-owned and women-owned firms in its contracting activities. As will be documented in this Study, during 2008 through 2013 the City of Austin has continued to be a source of demand in the regional economy for the products and services provided by M/WBEs—demand that, in general, is found to be lacking in the private sector of the Austin economy and the surrounding region.

As documented below in Chapter VI, the City’s prior efforts have produced positive results—M/WBEs earned between 20-21 percent of the City’s overall contracting and subcontracting dollars on contracts active during 2008 through 2013. Strict scrutiny requires a “strong basis in evidence”²⁸ for concluding that discrimination persists and “narrowly tailored”²⁹ measures to address that discrimination. These principles guide and inform our work for the City of Austin in this Study.

²⁸ *Id.* at 500 (citing *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)).

²⁹ *Id.* at 506-508. *See also*, *Wygant*, 476 U.S. at 274.

To ensure compliance with constitutional mandates and M/WBE best practices, the City of Austin commissioned NERA to examine the past and current status of M/WBEs in its geographic and product markets for Construction, Professional Services,³⁰ Nonprofessional Services and Commodities. The results of the 2015 Study provide the evidentiary record necessary for the City of Austin's consideration of whether to implement renewed M/WBE policies that comply with the requirements of the courts and to assess the extent to which previous efforts have assisted M/WBEs to participate on a fair basis in the City's contracting activity.

The 2015 Study finds both statistical and anecdotal evidence of business discrimination against M/WBEs in the private sector of the City of Austin market area. As a check on our statistical findings, we surveyed the contracting experiences and credit access experiences of M/WBEs and non-M/WBEs in the market area and we also conducted a series of in-depth personal interviews with local business enterprises, both M/WBE and non-M/WBE. Statistical analyses of the City's public sector contracting behavior appear below in Chapters II, III and VI.

A. Study Outline

The Study is presented in eight chapters, and is designed to answer the following questions:

- Chapter I: Introduction
- Chapter II: What is the relevant geographic market for the City of Austin and how is it defined? What are the relevant product markets for the City of Austin and how are they defined?
- Chapter III: What percentage of all businesses in the City of Austin's market area are owned by minorities and/or women? How are these availability estimates constructed? What are the comparable percentages for businesses owned by veterans?
- Chapter IV: Do minority and/or female wage and salary earners earn less than similarly situated nonminority males? Do minority and/or female business owners earn less from their businesses than similarly situated nonminority males? Are minorities and/or women in the City of Austin's market area less likely to be self-employed than similarly situated nonminority males? How do the findings in the City of Austin's market area differ from the national findings on these questions? How have these findings changed over time? What are the comparable findings for veterans?
- Chapter V: Do minorities and/or women face discrimination in the market for commercial capital and credit compared to similarly situated nonminority males? How, if at all, do findings locally differ from findings nationally?

³⁰ "Professional Services" is defined by Tex. Gov. Code Ann. § 2254, and includes architectural and engineering services, accounting services, landscape architecture services, medicine, optometry, real estate appraisal, and certain other consulting services.

- Chapter VI: To what extent have M/WBEs been utilized by the City of Austin on contracts and purchases active during 2008-2013, and how does this utilization compare to the availability of M/WBEs in the relevant market area? What are the comparable utilization findings for veterans?
- Chapter VII: How many M/WBEs experienced disparate treatment in the study period? What types of discriminatory experiences are most frequently encountered by M/WBEs? How do the experiences of M/WBEs differ from those of similar non-M/WBEs regarding difficulties in obtaining prime contracts and subcontracts? What were the experiences of veterans in this regard?
- Chapter VIII: What general policies and procedures govern the City of Austin's M/WBE program? What were some of the most frequently encountered comments from M/WBEs and non-M/WBEs concerning the City's contracting affirmative action programs?

In assessing these questions, we present in Chapters II through VII a series of quantitative and qualitative analyses that compare minority and/or female outcomes to nonminority male outcomes in all of these business-related areas. The Executive Summary, above, provides a brief overview of our key findings and conclusions.

Finally, Chapter IX contains our recommendations, based on the Study's findings and conclusions and our knowledge of M/WBE program best practices.

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II. Defining the Relevant Markets

A. Preparing the Master Contract/Subcontract Database

1. Overview

In the *Croson* decision, the Supreme Court indicated that the *national* findings by Congress of minority business discrimination in construction and related industries were not specific enough, or “narrowly tailored” enough, standing alone, to support an MBE program in the City of Richmond. For this reason, the first step in our evaluation of M/WBE availability and participation for the City of Austin is to define the relevant market area for its contracting and procurement activity. Markets have both a geographic dimension and a product, or industry, dimension.³¹ Both aspects of market definition are considered in this chapter. For this Study, we define the relevant geographic market area based on the City of Austin’s historical contracting and subcontracting records. This market dimension is determined empirically by examining the zip code distribution of utilized contractors and subcontractors.

Narrow tailoring also applies to product markets. The extent of disparity may differ from industry to industry just as it does among geographic locations.³² Documenting the specific industries that comprise the City of Austin’s contracting activities and the relative importance of each to contract and subcontract spending is important because it allows for: (1) implementation of more narrowly tailored availability estimation methods, (2) contract-level goal-setting, and (3) overall M/WBE availability estimates and annual goals that are a weighted average of underlying industry-level availability estimates, rather than a simple average. The weights used are the proportion of dollars awarded or paid within each industry and allow the overall availability measure to be influenced more heavily by availability in those industries where more contracting dollars are spent, and less heavily by availability in those industries where relatively fewer contracting dollars are spent.

We define the product market dimension by estimating which North American Industrial Classification System (NAICS) codes best describe each identifiable contractor, subcontractor, subconsultant, or supplier in those records.³³ In both cases, the definitions are weighted according to how many dollars were spent with firms from each zip code or NAICS code, respectively, so that locations and industries, respectively, receiving relatively more contracting dollars receive relatively more weight in the estimation of M/WBE availability. Once the geographic and industry parameters of the City of Austin’s market area have been defined, we can restrict our subsequent analyses to business enterprises and other phenomena within this market area. Restricting our analyses in this manner narrowly tailors our findings to the City of Austin’s specific market area and contracting circumstances.

³¹ See, for example, Areeda, P., L. Kaplow, and A. Edlin (2004).

³² See Wainwright (2000), documenting that, in general, the similarities in the amount of discrimination present in different industries and geographic locations significantly outweigh the differences.

³³ Executive Office of the President, Office of Management and Budget (2012).

2. City of Austin Contracting and Purchasing

With assistance from the City of Austin, NERA collected all prime contract and purchase order records (“prime contracts”) spanning Fiscal Years 2008 through 2013.³⁴ These data were retrieved from the Controller’s Office in the City’s Financial Services Department. For each prime contract from the study period, we identified the business name and address of the prime contractor or vendor, contract or purchase description, contract number, start date, initial award amount and total current paid amount. Additionally, we cross-referenced business names and addresses with City vendor lists and certified M/WBE lists to obtain contractor race and gender information.

Each prime contract was classified into one of four major procurement categories: (1) Construction, (2) Professional Services, including architectural, engineering, surveying and testing services, (3) Nonprofessional Services, and (4) Commodities. We also collected data on airport concessions revenues, spanning the same time period. The four major procurement categories were assigned based primarily on City records. Additionally, we focused our research on contracts that were classified as “large” purchases, with an initial award amount of more than \$50,000. Such purchases, collectively, accounted for over 95 percent of all City of Austin contract activity during the study period.

In this manner, a total of 5,060 prime contracts and purchase orders (hereafter “prime contracts” or “contracts”) were identified from City of Austin records as comprising the contract universe. According to City records these 5,060 contracts, collectively, had a cumulative award value of \$4.96 billion and a paid value of \$4.39 billion.³⁵

Not all of the prime contracts in the contract universe had subcontract opportunities or activity, however. In particular, contracts in the commodities category rarely have such opportunities.³⁶ Of the 5,060 City of Austin prime contracts in the contract universe, 570 (11.3%) were construction contracts, 628 (12.4%) were professional services contracts, 2,322 (45.9%) were general services contracts, and 1,540 (30.4%) were commodities contracts.

We conducted a careful review of the available subcontract data for the 3,520 contracts in construction, professional services and general services. Although the City of Austin attempts to collect and track all relevant subcontract activity, we determined that the available subcontract records were incomplete. In consultation with the City, NERA developed a plan to directly contact a large sample of the prime contractors associated with these contracts in order to verify the existing data and supplement it with additional subcontract records where appropriate. We also conducted additional research in the City’s own hard copy contract and subcontract files. As

³⁴ That is, prime contracts with a start date of October 1, 2007 through September 30, 2013 or that were active during this period.

³⁵ Award values are the amount of the original contract award, including amendments, change orders, etc., wherever it was possible to identify and include them. Paid values are the amounts actually paid on the contract as of the date we received the initial data from the City.

³⁶ Nor do contracts valued at under \$50,000.

noted above, it was not necessary to include commodities contracts in this supplemental data collection and verification effort. These prime contracts, of course, remained in the overall study universe.

The 3,520 prime contracts in the contract universe were distributed among 1,457 different prime contractors. Our sample was designed to include 1,000 prime contractors and their associated prime contracts for further data collection and verification. To draw the sample, we first selected the 280 prime contractors who had one or more contracts in the universe where the City had any associated electronic subcontract records on file. Next, we rank ordered the remaining 1,177 prime contractors in descending order of their total contract dollar value during the study period and chose the top 720 of these prime contractors to include in the sample.

The resulting sample of 1,000 prime contractors and 3,009 associated prime contracts accounted for 85.4 percent of all non-commodities prime contracts in the universe and over 98.7 percent of all non-commodities contract dollars in the universe. After an intensive data collection effort, and with the assistance of the City, we were ultimately able to obtain the associated subcontract information for 2,394 of the 3,009 prime contracts, or 79.6 percent of all prime contracts and 92.5 percent of all prime contract dollars. These percentages are sufficiently large to be well representative of the entire universe of City of Austin contracts and subcontracts being examined for this Study. These 2,394 prime contracts had 9,533 associated subcontracts.³⁷

Dollar values reported by prime contractors did not always match City records exactly. According to prime-reported amounts, the total award dollar value of the 2,394 prime contracts was \$3.79 billion and the total paid dollar value was \$3.40 billion. In order to achieve consistency with the subcontract dollar values we collected, we used prime-reported dollar amounts for the remainder of the relevant analyses in this report.³⁸

Combining the data collected in our data supplementation and verification sample with the data on commodities contracts, a total of 3,934 prime contracts and 9,533 associated subcontracts were collected and analyzed. The 3,934 prime contracts had a total award value of approximately \$4.94 billion and a total paid value of approximately \$4.22 billion. Together, as shown below in Tables 2.1 through 2.3, these prime contracts and subcontracts comprise the Master Contract/Subcontract Database compiled for this Study.

Table 2.1 shows, for each major procurement category, the total number of prime contracts and associated subcontracts awarded, the total number of prime contracts and associated subcontracts

³⁷ In the original records we received from the City, these 2,394 prime contracts had 6,766 associated subcontracts recorded electronically.

³⁸ In general, we found that prime-reported paid amounts exceeded City reported paid amounts (by about 14%), primarily because the data we collected from the prime firms occurred during the several months following our initial receipt of data from the City. Prime-reported award amounts were also somewhat larger (by about 10%) than those found in City records, most likely due to incomplete recording of change orders, extensions, etc., in the City's electronic records.

substantially completed,³⁹ total dollars awarded, and total dollars paid. Tables 2.2 and 2.3 show comparable information for each year of the study period. Table 2.4 shows comparable information for each major City department.

Table 2.1. Summary of Master Contract/Subcontract Database: City of Austin Contracts and Subcontracts by Procurement Category

CONTRACT CATEGORY	NUMBER OF AWARDED CONTRACTS	NUMBER OF PAID CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
<i>CONSTRUCTION</i>			1,418,347,835	1,230,402,467
<i>Prime Contracts</i>	475	441	938,378,101	807,980,792
<i>Subcontracts</i>	4,820	4,451	479,969,734	422,421,674
<i>PROFESSIONAL SERVICES</i>			643,671,866	538,903,507
<i>Prime Contracts</i>	479	405	435,877,215	355,101,765
<i>Subcontracts</i>	2,693	2,306	207,794,651	183,801,742
<i>NONPROFESSIONAL SERVICES</i>			1,729,836,803	1,412,133,147
<i>Prime Contracts</i>	1,440	1,306	1,522,111,142	1,268,934,508
<i>Subcontracts</i>	2,020	1,754	207,725,662	143,198,639
<i>COMMODITIES</i>			1,151,098,221	1,038,323,711
<i>Prime Contracts</i>	1,540	1,381	1,151,098,221	1,038,323,711
<i>Subcontracts</i>	0	0	0	0
<i>GRAND TOTAL</i>			4,942,954,725	4,219,762,832
<i>Prime Contracts</i>	3,934	3,533	4,047,464,677	3,470,340,777
<i>Subcontracts</i>	9,533	8,511	895,490,047	749,422,054

Source: NERA calculations from Master Contract/Subcontract Database.

Note: Prime Contract dollar amounts are net of subcontract amounts.

³⁹ For purposes of the Study, a contract was considered to be substantially complete if at least 75 percent of the total award amount had been paid as of the time we verified the prime contract data.

Table 2.2 shows the total number of prime contracts awarded during each year of the Study period and total dollars awarded for those contracts, by major procurement category.

Table 2.2. Summary of Master Contract/Subcontract Database: Prime Contracts by Year (Dollars Awarded)

PROCUREMENT CATEGORY & YEAR	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)
<i>CONSTRUCTION</i>		
2008	86	265,757,392
2009	63	191,127,539
2010	106	285,464,692
2011	105	373,144,700
2012	73	178,366,157
2013	42	124,487,353
TOTAL	475	1,418,347,833
<i>PROFESSIONAL SERVICES</i>		
2008	235	212,326,489
2009	68	60,703,752
2010	42	68,760,084
2011	78	242,216,649
2012	32	37,640,800
2013	24	22,024,091
TOTAL	479	643,671,865
<i>NONPROFESSIONAL SERVICES</i>		
2008	531	734,557,298
2009	195	207,504,004
2010	245	192,994,733
2011	152	195,584,833
2012	173	113,608,374
2013	144	285,587,562
TOTAL	1,440	1,729,836,806

Table 2.2. Summary of Master Contract/Subcontract Database: Prime Contracts by Year (Dollars Awarded), cont'd

PROCUREMENT CATEGORY & YEAR	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)
<i>COMMODITIES</i>		
2008	528	598,525,771
2009	236	140,745,182
2010	178	103,283,079
2011	214	110,363,870
2012	227	117,762,306
2013	157	80,418,012
TOTAL	1,540	1,151,098,221
<i>GRAND TOTAL</i>		
2008	1,380	1,811,166,950
2009	562	600,080,478
2010	571	650,502,588
2011	549	921,310,053
2012	505	447,377,636
2013	367	512,517,019
TOTAL	3,934	4,942,954,724

Source: See Table 2.1.

Table 2.3 shows the total number of prime contracts awarded during each year of the Study period and total dollars paid for those contracts, by major procurement category.

Table 2.3. Summary of Master Contract/Subcontract Database: Prime Contracts by Year (Dollars Paid)

PROCUREMENT CATEGORY & YEAR	NUMBER OF PRIME CONTRACTS	DOLLARS PAID (\$)
<i>CONSTRUCTION</i>		
2008	86	267,157,844
2009	63	188,867,759
2010	106	280,470,316
2011	105	342,554,451
2012	73	104,540,355
2013	42	46,811,740
TOTAL	475	1,230,402,465
<i>PROFESSIONAL SERVICES</i>		
2008	235	196,947,060
2009	68	50,752,878
2010	42	51,612,939
2011	78	205,194,830
2012	32	24,068,158
2013	24	10,327,642
TOTAL	479	538,903,506
<i>NONPROFESSIONAL SERVICES</i>		
2008	531	699,845,766
2009	195	186,340,730
2010	245	174,733,675
2011	152	165,153,932
2012	173	96,769,247
2013	144	89,289,797
TOTAL	1,440	1,412,133,147

Table 2.3. Summary of Master Contract/Subcontract Database: Prime Contracts by Year (Dollars Paid), cont'd

PROCUREMENT CATEGORY & YEAR	NUMBER OF PRIME CONTRACTS	DOLLARS PAID (\$)
<i>COMMODITIES</i>		
2008	528	576,043,104
2009	236	137,628,220
2010	178	100,330,758
2011	214	96,349,250
2012	227	98,149,203
2013	157	29,823,178
TOTAL	1,540	1,038,323,711
<i>GRAND TOTAL</i>		
2008	1,380	1,739,993,774
2009	562	563,589,587
2010	571	607,147,687
2011	549	809,252,463
2012	505	323,526,962
2013	367	176,252,357
TOTAL	3,934	4,219,762,830

Source: See Table 2.1.

Table 2.4 shows the total number of prime contracts awarded during each year of the Study period and total dollars awarded and paid for those contracts, by City department.

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
CONSTRUCTION	475	1,418,347,835	1,230,402,467
AUSTIN CONVENTION CENTER	6	6,297,440	6,207,210
AUSTIN ENERGY	27	115,652,239	112,501,599
AUSTIN RESOURCE RECOVERY	8	9,950,550	9,883,219
AUSTIN WATER UTILITY	157	603,452,355	555,056,036
AVIATION	20	40,158,587	39,748,395
CODE COMPLIANCE	1	61,500	61,500
EMERGENCY MEDICAL SERVICES	1	2,087,653	2,075,909
FINANCIAL SERVICES	13	83,472,387	83,142,421
FIRE	3	4,408,577	4,408,577
FLEET MAINTENANCE	1	68,100	68,100
HEALTH & HUMAN SERVICES	1	12,135,384	11,528,615
LIBRARY	4	3,873,680	3,873,680
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	34	17,915,160	13,304,151
PARKS & RECREATION	23	42,526,626	37,003,449
PLANNING AND DEVELOPMENT REVIEW	1	2,036,057	2,036,057
POLICE	1	241,741	186,801
PUBLIC WORKS - TRANSPORTATION	69	178,876,427	154,114,991
STREET LIGHTING	54	117,413,664	63,327,846
TRANSPORTATION, PLANNING & SUSTAINABILITY	7	8,699,912	7,811,088
WATERSHED PROTECTION & DEVELOPMENT REVIEW	43	159,867,297	115,085,722
WIRELESS COMMUNICATIONS	1	9,152,500	8,977,102

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
PROFESSIONAL SERVICES	479	643,671,866	538,903,507
AUSTIN CONVENTION CENTER	3	16,158,978	15,290,849
AUSTIN ENERGY	5	14,749,999	13,136,307
AUSTIN RESOURCE RECOVERY	2	2,336,180	2,314,565
AUSTIN WATER UTILITY	50	289,951,648	247,931,300
AVIATION	5	5,871,318	5,782,318
ECONOMIC DEVELOPMENT	7	1,962,267	1,810,397
FINANCIAL SERVICES	103	94,692,629	92,206,173
FLEET MAINTENANCE	1	1,263,731	1,263,731
HEALTH & HUMAN SERVICES	2	1,894,268	1,780,362
HUMAN RESOURCES	1	767,000	-
LAW	14	5,670,826	1,232,123
MUNICIPAL COURT	1	478,691	454,107
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	2	721,978	672,445
PARKS & RECREATION	6	8,036,255	7,715,197
PLANNING AND DEVELOPMENT REVIEW	3	2,261,788	2,148,138
POLICE	3	568,188	568,188
PUBLIC WORKS - TRANSPORTATION	4	3,920,620	3,777,123
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	2	2,414,729	603,550
STREET LIGHTING	247	175,799,698	126,922,187
TRANSPORTATION, PLANNING & SUSTAINABILITY	10	5,304,208	5,030,851
WATERSHED PROTECTION & DEVELOPMENT REVIEW	8	8,846,868	8,263,595

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
NONPROFESSIONAL SERVICES	1,440	1,729,836,803	1,412,133,147
AUSTIN CONVENTION CENTER	31	52,907,248	51,874,610
AUSTIN ENERGY	238	313,432,824	280,933,334
AUSTIN RESOURCE RECOVERY	28	16,485,104	14,952,391
AUSTIN WATER UTILITY	77	44,927,516	34,662,730
AVIATION	30	54,575,122	49,007,956
BUILDING SERVICES	3	261,487	-
CITY AUDITOR	1	320,243	320,243
COMMUNICATIONS & PUBLIC INFORMATION	2	493,648	431,872
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	119	85,802,026	66,480,234
COMMUNITY CARE	8	7,857,164	7,421,914
ECONOMIC DEVELOPMENT	34	39,547,515	35,614,345
EMERGENCY MEDICAL SERVICES	5	3,731,928	3,665,239
FINANCIAL SERVICES	319	587,164,156	559,390,612
FIRE	4	810,431	807,961
FLEET MAINTENANCE	41	23,581,695	20,034,969
GOVERNMENTAL RELATIONS	15	1,747,463	1,724,960
HEALTH & HUMAN SERVICES	181	90,954,534	83,436,004
HUMAN RESOURCES	39	103,501,694	94,356,238
LAW	5	651,665	619,723
LIBRARY	12	11,804,706	2,532,706
MUNICIPAL COURT	5	4,092,500	4,021,856
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	94	39,709,326	38,188,924
PARKS & RECREATION	41	26,355,357	23,596,615
PLANNING AND DEVELOPMENT REVIEW	6	1,094,291	1,090,856
POLICE	16	4,938,803	4,378,082
PUBLIC SAFETY & SECURITY	1	71,181	71,181
PUBLIC WORKS - TRANSPORTATION	11	3,735,761	3,526,481
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	3	530,866	506,634
STREET LIGHTING	46	188,042,246	18,009,424

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
NONPROFESSIONAL SERVICES, cont'd	1,440	1,729,836,803	1,412,133,147
TRANSPORTATION, PLANNING & SUSTAINABILITY	4	4,859,853	2,802,002
WATERSHED PROTECTION & DEVELOPMENT REVIEW	13	12,784,804	4,956,258
WIRELESS COMMUNICATIONS	8	3,063,648	2,716,791

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
COMMODITIES	1,540	1,151,098,221	1,038,323,711
AUSTIN CONVENTION CENTER	23	6,099,007	5,590,653
AUSTIN ENERGY	346	358,513,816	317,419,623
AUSTIN RESOURCE RECOVERY	17	22,821,952	17,990,021
AUSTIN WATER UTILITY	152	73,334,025	70,185,792
AVIATION	33	7,290,997	6,618,237
CITY CLERK	2	320,491	165,680
CODE COMPLIANCE	1	51,546	51,546
COMMUNICATIONS & PUBLIC INFORMATION	1	52,800	52,800
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	170	109,415,373	99,509,600
COMMUNITY CARE	7	1,891,943	1,871,525
CONTRACT & LAND MANAGEMENT	1	77,576	76,943
ECONOMIC DEVELOPMENT	2	146,123	71,571
EMERGENCY MEDICAL SERVICES	28	4,159,313	5,095,971
FINANCIAL SERVICES	213	175,779,899	157,239,644
FIRE	23	5,848,173	5,635,953
FLEET MAINTENANCE	283	263,903,197	232,395,841
HEALTH & HUMAN SERVICES	13	5,657,350	5,245,111
LIBRARY	16	16,556,339	15,942,185
PARKS & RECREATION	43	10,111,837	9,172,612
POLICE	50	14,712,953	13,682,322
PUBLIC WORKS - TRANSPORTATION	32	50,829,968	53,885,105
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	10	763,694	659,127
STREET LIGHTING	3	1,379,946	1,379,946
TRANSPORTATION	25	8,007,472	5,446,170
WATERSHED PROTECTION & DEVELOPMENT REVIEW	27	5,386,417	5,115,801
WIRELESS COMMUNICATIONS	19	7,986,015	7,823,931

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
OVERALL	3,934	4,942,954,725	4,219,762,832
AUSTIN CONVENTION CENTER	63	81,462,673	78,963,323
AUSTIN ENERGY	616	802,348,877	723,990,863
AUSTIN RESOURCE RECOVERY	55	51,593,786	45,140,195
AUSTIN WATER UTILITY	436	1,011,665,543	907,835,859
AVIATION	88	107,896,024	101,156,906
BUILDING SERVICES	3	261,487	-
CITY AUDITOR	1	320,243	320,243
CITY CLERK	2	320,491	165,680
CODE COMPLIANCE	2	113,046	113,046
COMM. & PUBLIC INFORMATION	3	546,448	484,672
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	289	195,217,398	165,989,833
COMMUNITY CARE	15	9,749,107	9,293,438
CONTRACT & LAND MANAGEMENT	1	77,576	76,943
ECONOMIC DEVELOPMENT	43	41,655,905	37,496,313
EMERGENCY MEDICAL SERVICES	34	9,978,894	10,837,119
FINANCIAL SERVICES	648	941,109,071	891,978,851
FIRE	30	11,067,181	10,852,491
FLEET MAINTENANCE	326	288,816,722	253,762,641
GOVERNMENTAL RELATIONS	15	1,747,463	1,724,960
HEALTH & HUMAN SERVICES	197	110,641,536	101,990,092
HUMAN RESOURCES	40	104,268,694	94,356,238
LAW	19	6,322,491	1,851,846
LIBRARY	32	32,234,725	22,348,571
MUNICIPAL COURT	6	4,571,191	4,475,963
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	130	58,346,464	52,165,519
PARKS & RECREATION	113	87,030,075	77,487,873
PLANNING AND DEVELOPMENT REVIEW	10	5,392,136	5,275,052
POLICE	70	20,461,685	18,815,393
PUBLIC SAFETY & SECURITY	1	71,181	71,181

Table 2.4. Summary of Master Contract/Subcontract Database: Prime Contracts by City Department, cont'd

DEPARTMENT	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
OVERALL, cont'd	3,934	4,942,954,725	4,219,762,832
PUBLIC WORKS - TRANSPORTATION	116	237,362,776	215,303,700
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	15	3,709,289	1,769,311
STREET LIGHTING	350	482,635,553	209,639,402
TRANSPORTATION	25	8,007,472	5,446,170
TRANSPORTATION, PLANNING & SUSTAINABILITY	21	18,863,973	15,643,941
WATERSHED PROTECTION & DEVELOPMENT REVIEW	91	186,885,386	133,421,377
WIRELESS COMMUNICATIONS	28	20,202,163	19,517,824

Source: See Table 2.1.

B. Geographic Market Definition for Contracting and Procurement

To determine the geographic dimension of the City of Austin's contracting and procurement markets, we used the Master Contract/Subcontract Database, as described in the previous section, to obtain the zip codes and thereby the county and state for each contractor and subcontractor establishment identified in the database. Using this location information, we then calculated the percentage of City of Austin contract and subcontract dollars awarded to establishments by state and county during the study period.

As discussed above, the geographic market area is defined as that region which accounts for approximately 75 percent of overall contracting and procurement spending by a given state or local government. Contractors and vendors with locations in the Austin-Round Rock, TX Metropolitan Statistical Area (MSA) account for the large majority of contracting and procurement expenditures by the City of Austin during the study period.⁴⁰

As shown in Table 2.5, the overall share of expenditures inside this market area is 77.6 percent of dollars awarded and 76.1 percent of dollars paid. The share is 75.0 percent or greater in Construction, Professional Services and Nonprofessional Services regardless of whether dollars awarded or dollars paid is used as the metric. The share is highest in Professional Services, followed by Construction, Nonprofessional Services and finally Commodities.⁴¹ For purposes of

⁴⁰ The Austin-Round Rock, TX MSA includes Travis County, Williamson County, Bastrop County, Hays County and Caldwell County.

⁴¹ For informational purposes, Table 2.5 also shows the share of awards and payments inside and outside the State of Texas.

this Study, therefore, we define the relevant geographic market area to be the Austin-Round Rock, TX MSA.

Table 2.5. Distribution of Contracting Dollars by Geographic Location

Location	Construction (%)	Profess. Services (%)	Nonprofess. Services (%)	Commodities (%)	Total (%)
<i>Dollars Awarded</i>					
Inside Austin Market Area	83.0	93.4	77.9	61.9	77.6
Outside Austin Market Area	17.0	6.6	22.1	38.1	22.4
<i>Dollars Paid</i>					
Inside Austin Market Area	82.5	93.2	75.0	61.3	76.1
Outside Austin Market Area	17.5	6.8	25.0	38.7	23.9
<i>Dollars Awarded</i>					
Inside Texas	96.3	97.3	86.8	84.8	90.4
Outside Texas	3.7	2.7	13.2	15.2	9.6
<i>Dollars Paid</i>					
Inside Texas	96.1	97.3	84.9	84.1	89.5
Outside Texas	3.9	2.7	15.1	15.9	10.5

Source: See Table 2.1.

Table 2.6 shows the geographic distribution of contract and procurement dollars across all procurement categories within the Austin market area. About 85 percent of all dollars awarded within the market area are awarded to firms with locations inside Travis County, followed in descending order by firms with locations in the Texas counties of Williamson, Hays, Bastrop and Caldwell.

Table 2.6. Distribution of City of Austin Contract Award Dollars by State and County, Inside the Market Area

STATE	COUNTY	AMOUNT (\$)	PERCENT	CUMULATIVE PERCENT
TX	Travis	3,252,875,363	84.75	84.75
TX	Williamson	386,670,891	10.07	94.83
TX	Hays	160,778,423	4.19	99.02
TX	Bastrop	37,389,419	0.97	99.99
TX	Caldwell	307,196	0.01	100.00

Source: See Table 2.1.

Outside the market area, counties with a significant amount of spending activity (defined, somewhat arbitrarily, as geographies that accounted for more than approximately 1.0 percent of total spending among three or more vendors) included:

CONSTRUCTION

Harris, TX
Tarrant, TX
Bell, TX
Denton, TX
Jefferson, AL
Fort Bend, TX
Bexar, TX
Lake, IL
Dallas, TX
Comal, TX
Maricopa, AZ

PROFESSIONAL SERVICES

Harris, TX
Dallas, TX
Bexar, TX
Tarrant, TX

PROFESSIONAL SERVICES, cont'd

Alameda, CA
Contra Costa, CA
Middlesex, MA

NONPROFESSIONAL SERVICES

Harris, TX
Fulton, GA
Dallas, TX
Hamilton, OH
Collin, TX
Bexar, TX
Tarrant, TX
Alberta, Canada
Hennepin, MN
Hartford, CT
Denton, TX
Franklin, OH

<u>NONPROFESSIONAL SERVICES, cont'd</u>	Dallas, TX
Fairfax, VA	Tarrant, TX
<u>COMMODITIES</u>	Cook, IL
Harris, TX	Comal, TX
Bexar, TX	Fairfax, VA
Orange, FL	Los Angeles, CA
Fort Bend, TX	

C. Product Market Definition for Contracting and Procurement

Using the major procurement categories for each prime contract and the primary NAICS codes assigned by NERA to each prime contractor and subcontractor in the Master Contract/Subcontract Database, we identified the most important Industry Groups within each contracting and procurement category, as measured by total dollars awarded. The relevant NAICS codes and their associated dollar weights appear below in Tables 2.7 through 2.10 for Construction, Professional Services, Nonprofessional Services and Commodities, respectively.

Each Industry Group (four-digit NAICS) identified in Tables 2.7 through 2.10 consists of several more detailed Industries (five- and six-digit NAICS) and, as well, is part of a more aggregated Industry Sub-sector (three-digit NAICS). Overall, City of Austin contracting awards occur in 79 NAICS Industry Sub-sectors, 207 NAICS Industry Groups and 470 NAICS Industries. In Construction, contract spending occurs across 46 NAICS Industry Sub-sectors, 107 NAICS Industry Groups and 208 NAICS Industries. In Professional Services, spending occurs across 43 NAICS Industry Sub-sectors, 83 NAICS Industry Groups and 154 NAICS Industries. In Nonprofessional Services, spending occurs across 72 NAICS Industry Sub-sectors, 178 NAICS Industry Groups and 347 NAICS Industries. In Commodities, spending occurs across 53 NAICS Industry Sub-sectors, 138 NAICS Industry Groups and 251 NAICS Industries.

Clearly, many industries are part of the City of Austin's contracting activities. However, it is clear from Tables 2.7 through 2.10 that actual contracting and subcontracting opportunities are not distributed evenly among these many industries. In fact, the distribution of contract expenditures is highly skewed. In Construction, for example, we see from Table 2.7 that just six Industry Groups alone (NAICS 2371, 2373, 2362, 2379, 2382 and 2381) account for almost three-fourths of all award dollars, and just 17 Industry Groups account for over 90 percent, with the remainder distributed among another 90 additional Industry Groups.

Table 2.7. Distribution of Contract and Subcontract Dollars Awarded by Industry Group: Construction

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
2371	Utility System Construction	26.11	26.11
2373	Highway, Street, and Bridge Construction	15.08	41.19
2362	Nonresidential Building Construction	11.78	52.97
2379	Other Heavy and Civil Engineering Construction	7.84	60.81
2382	Building Equipment Contractors	7.42	68.23
2381	Foundation, Structure, and Building Exterior Contractors	6.64	74.87
4841	General Freight Trucking	2.64	77.51
2389	Other Specialty Trade Contractors	2.45	79.96
5629	Remediation and Other Waste Management Services	1.86	81.82
3273	Cement and Concrete Product Manufacturing	1.38	83.20
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	1.20	84.40
5413	Architectural, Engineering, and Related Services	1.17	85.57
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	1.17	86.74
3342	Communications Equipment Manufacturing	1.08	87.82
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.98	88.81
5617	Services to Buildings and Dwellings	0.96	89.77
2361	Residential Building Construction	0.94	90.71
2383	Building Finishing Contractors	0.84	91.55
4247	Petroleum and Petroleum Products Merchant Wholesalers	0.66	92.21
3323	Architectural and Structural Metals Manufacturing	0.64	92.85
8134	Civic and Social Organizations	0.59	93.45
3312	Steel Product Manufacturing from Purchased Steel	0.53	93.98
2213	Water, Sewage and Other Systems	0.48	94.46
3329	Other Fabricated Metal Product Manufacturing	0.44	94.89
5613	Employment Services	0.42	95.31
3399	Other Miscellaneous Manufacturing	0.41	95.72
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.32	96.05
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0.31	96.35
3333	Commercial and Service Industry Machinery Manufacturing	0.28	96.63
8112	Electronic and Precision Equipment Repair and Maintenance	0.26	96.89

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
5419	Other Professional, Scientific, and Technical Services	0.20	97.09
3353	Electrical Equipment Manufacturing	0.20	97.28
4471	Gasoline Stations	0.19	97.47
6242	Community Food and Housing, and Emergency and Other Relief Services	0.17	97.63
5415	Computer Systems Design and Related Services	0.16	97.80
5616	Investigation and Security Services	0.15	97.95
3255	Paint, Coating, and Adhesive Manufacturing	0.14	98.09
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	0.13	98.21
5416	Management, Scientific, and Technical Consulting Services	0.13	98.34
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0.11	98.4
4842	Specialized Freight Trucking	0.11	98.57
3261	Plastics Product Manufacturing	0.10	98.67
5321	Automotive Equipment Rental and Leasing	0.10	98.77
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.09	98.85
3241	Petroleum and Coal Products Manufacturing	0.09	98.94
5239	Other Financial Investment Activities	0.08	99.02
	Balance of industries (61 industry groups)	0.98	100.00
<i>TOTAL - \$1,418,347,835</i>			

Source: See Table 2.1.

In Professional Services (Table 2.8), there is an even more concentrated pattern—one Industry Group alone (NAICS 5413) accounts for more than half of all award dollars and 7 Industry Groups account for 90 percent, with the balance distributed among another 76 Industry Groups.

Table 2.8. Distribution of Contract and Subcontract Dollars Awarded by Industry Group: Professional Services

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
5413	Architectural, Engineering, and Related Services	53.04	53.04
2362	Nonresidential Building Construction	24.93	77.97
2382	Building Equipment Contractors	4.16	82.12
5416	Management, Scientific, and Technical Consulting Services	3.83	85.95

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
2371	Utility System Construction	2.27	88.22
2379	Other Heavy and Civil Engineering Construction	1.16	89.38
2389	Other Specialty Trade Contractors	0.97	90.35
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.92	91.27
5411	Legal Services	0.90	92.17
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.73	92.90
5613	Employment Services	0.65	93.55
2381	Foundation, Structure, and Building Exterior Contractors	0.64	94.18
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	0.62	94.80
2361	Residential Building Construction	0.49	95.29
2383	Building Finishing Contractors	0.41	95.70
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.35	96.05
5629	Remediation and Other Waste Management Services	0.25	96.31
2373	Highway, Street, and Bridge Construction	0.25	96.56
3323	Architectural and Structural Metals Manufacturing	0.23	96.79
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.23	97.02
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.23	97.25
5239	Other Financial Investment Activities	0.21	97.47
4841	General Freight Trucking	0.21	97.67
8114	Personal and Household Goods Repair and Maintenance	0.18	97.85
5418	Advertising, Public Relations, and Related Services	0.17	98.02
5616	Investigation and Security Services	0.16	98.18
2372	Land Subdivision	0.16	98.34
5242	Agencies, Brokerages, and Other Insurance Related Activities	0.13	98.47
3231	Printing and Related Support Activities	0.12	98.59
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0.11	98.70
4543	Direct Selling Establishments	0.09	98.79
5614	Business Support Services	0.09	98.88
6241	Individual and Family Services	0.09	98.97
5414	Specialized Design Services	0.09	99.06

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
	Balance of industries (49 industry groups)	0.94	100.00
	<i>TOTAL - \$643,671,866</i>		

Source: See Table 2.1.

In Nonprofessional Services (Table 2.9), just 10 Industry Groups account for more than half of all awards, 24 Industry Groups account for three-fourths, and the remainder is distributed among 154 additional Industry Groups.

Table 2.9. Distribution of Contract and Subcontract Dollars Awarded by Industry Group: Nonprofessional Services

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
5241	Insurance Carriers	12.31	12.31
2362	Nonresidential Building Construction	8.11	20.42
5614	Business Support Services	5.73	26.15
2382	Building Equipment Contractors	4.96	31.11
5617	Services to Buildings and Dwellings	4.13	35.23
5415	Computer Systems Design and Related Services	4.06	39.30
5413	Architectural, Engineering, and Related Services	3.68	42.97
5242	Agencies, Brokerages, and Other Insurance Related Activities	3.65	46.62
5418	Advertising, Public Relations, and Related Services	3.33	49.94
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2.91	52.85
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2.00	54.86
5416	Management, Scientific, and Technical Consulting Services	1.97	56.82
8129	Other Personal Services	1.88	58.70
6242	Community Food and Housing, and Emergency and Other Relief Services	1.76	60.46
5112	Software Publishers	1.74	62.21
5613	Employment Services	1.60	63.80
6241	Individual and Family Services	1.59	65.39
5616	Investigation and Security Services	1.55	66.94
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1.47	68.41
5179	Other Telecommunications	1.46	69.87
3351	Electric Lighting Equipment Manufacturing	1.44	71.31

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
5223	Activities Related to Credit Intermediation	1.41	72.72
5621	Waste Collection	1.31	74.03
5622	Waste Treatment and Disposal	1.29	75.31
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1.13	76.44
2373	Highway, Street, and Bridge Construction	1.06	77.50
3341	Computer and Peripheral Equipment Manufacturing	1.03	78.53
8139	Business, Professional, Labor, Political, and Similar Organizations	1.03	79.56
2381	Foundation, Structure, and Building Exterior Contractors	0.99	80.56
8131	Religious Organizations	0.95	81.50
2371	Utility System Construction	0.91	82.41
2389	Other Specialty Trade Contractors	0.89	83.30
6243	Vocational Rehabilitation Services	0.89	84.19
5629	Remediation and Other Waste Management Services	0.75	84.93
5172	Wireless Telecommunications Carriers (except Satellite)	0.71	85.64
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.70	86.34
2361	Residential Building Construction	0.70	87.05
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.66	87.71
3342	Communications Equipment Manufacturing	0.59	88.30
8111	Automotive Repair and Maintenance	0.56	88.86
2383	Building Finishing Contractors	0.52	89.38
6211	Offices of Physicians	0.49	89.87
2379	Other Heavy and Civil Engineering Construction	0.48	90.35
3323	Architectural and Structural Metals Manufacturing	0.46	90.82
6116	Other Schools and Instruction	0.44	91.26
3344	Semiconductor and Other Electronic Component Manufacturing	0.43	91.69
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0.43	92.12
3259	Other Chemical Product and Preparation Manufacturing	0.39	92.51
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.32	92.82
5151	Radio and Television Broadcasting	0.31	93.13
5419	Other Professional, Scientific, and Technical Services	0.29	93.42
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.27	93.69
3339	Other General Purpose Machinery Manufacturing	0.26	93.95

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
2372	Land Subdivision	0.25	94.20
2211	Electric Power Generation, Transmission and Distribution	0.24	94.44
5411	Legal Services	0.23	94.68
5321	Automotive Equipment Rental and Leasing	0.21	94.89
4841	General Freight Trucking	0.21	95.09
6213	Offices of Other Health Practitioners	0.21	95.30
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0.19	95.49
4413	Automotive Parts, Accessories, and Tire Stores	0.18	95.67
6244	Child Day Care Services	0.18	95.85
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.18	96.03
4247	Petroleum and Petroleum Products Merchant Wholesalers	0.15	96.18
4471	Gasoline Stations	0.15	96.33
7223	Special Food Services	0.15	96.48
8133	Social Advocacy Organizations	0.15	96.62
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.14	96.76
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.14	96.90
6215	Medical and Diagnostic Laboratories	0.13	97.03
5221	Depository Credit Intermediation	0.12	97.15
3231	Printing and Related Support Activities	0.12	97.27
4521	Department Stores	0.12	97.39
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.12	97.50
4884	Support Activities for Road Transportation	0.11	97.62
3353	Electrical Equipment Manufacturing	0.11	97.73
4543	Direct Selling Establishments	0.10	97.82
4246	Chemical and Allied Products Merchant Wholesalers	0.09	97.91
8123	Drycleaning and Laundry Services	0.09	98.00
5311	Lessors of Real Estate	0.08	98.09
8132	Grantmaking and Giving Services	0.08	98.16
4411	Automobile Dealers	0.08	98.24
4881	Support Activities for Air Transportation	0.07	98.31
8134	Civic and Social Organizations	0.07	98.38
4431	Electronics and Appliance Stores	0.07	98.45
4232	Furniture and Home Furnishing Merchant Wholesalers	0.06	98.51

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
6221	General Medical and Surgical Hospitals	0.06	98.57
5152	Cable and Other Subscription Programming	0.05	98.62
4842	Specialized Freight Trucking	0.05	98.67
3222	Converted Paper Product Manufacturing	0.05	98.72
1114	Greenhouse, Nursery, and Floriculture Production	0.05	98.77
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0.05	98.82
5414	Specialized Design Services	0.05	98.87
8122	Death Care Services	0.05	98.92
3364	Aerospace Product and Parts Manufacturing	0.05	98.97
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.04	99.01
	Balance of industries (82 industry groups)	0.97	100.00
	<i>TOTAL - \$1,729,836,803</i>		

Source: See Table 2.1.

Finally, in Commodities (Table 2.10), we see that 10 Industry Groups account for more than half of all awards, 20 Industry Groups account for three-fourths, and the remainder is distributed among 118 additional Industry Groups.

Table 2.10. Distribution of Contract and Subcontract Dollars Awarded by Industry Group: Commodities

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	9.89	9.89
4247	Petroleum and Petroleum Products Merchant Wholesalers	8.42	18.31
2371	Utility System Construction	6.07	24.38
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	5.68	30.05
4411	Automobile Dealers	5.09	35.14
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	4.48	39.62
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	3.42	43.04
2362	Nonresidential Building Construction	3.29	46.33
3342	Communications Equipment Manufacturing	3.15	49.48
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	3.06	52.53
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2.99	55.52

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
2382	Building Equipment Contractors	2.87	58.39
5416	Management, Scientific, and Technical Consulting Services	2.63	61.02
5415	Computer Systems Design and Related Services	2.50	63.51
3341	Computer and Peripheral Equipment Manufacturing	2.19	65.70
3353	Electrical Equipment Manufacturing	2.18	67.88
2373	Highway, Street, and Bridge Construction	2.04	69.92
3241	Petroleum and Coal Products Manufacturing	1.78	71.70
3261	Plastics Product Manufacturing	1.73	73.43
3211	Sawmills and Wood Preservation	1.63	75.06
4232	Furniture and Home Furnishing Merchant Wholesalers	1.59	76.66
3274	Lime and Gypsum Product Manufacturing	1.43	78.09
5413	Architectural, Engineering, and Related Services	1.35	79.44
3362	Motor Vehicle Body and Trailer Manufacturing	1.27	80.70
4246	Chemical and Allied Products Merchant Wholesalers	1.23	81.93
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	1.09	83.02
5112	Software Publishers	0.88	83.90
4241	Paper and Paper Product Merchant Wholesalers	0.81	84.71
4532	Office Supplies, Stationery, and Gift Stores	0.78	85.49
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.74	86.22
5179	Other Telecommunications	0.69	86.91
4543	Direct Selling Establishments	0.59	87.51
3251	Basic Chemical Manufacturing	0.59	88.09
4413	Automotive Parts, Accessories, and Tire Stores	0.55	88.64
5614	Business Support Services	0.55	89.19
3259	Other Chemical Product and Preparation Manufacturing	0.44	89.63
3339	Other General Purpose Machinery Manufacturing	0.43	90.06
3364	Aerospace Product and Parts Manufacturing	0.42	90.48
4481	Clothing Stores	0.40	90.87
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.38	91.25
5239	Other Financial Investment Activities	0.37	91.62
3361	Motor Vehicle Manufacturing	0.36	91.98
8111	Automotive Repair and Maintenance	0.35	92.33
3359	Other Electrical Equipment and Component Manufacturing	0.30	92.63
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.29	92.91

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
2389	Other Specialty Trade Contractors	0.27	93.18
4541	Electronic Shopping and Mail-Order Houses	0.27	93.45
3273	Cement and Concrete Product Manufacturing	0.27	93.72
4441	Building Material and Supplies Dealers	0.25	93.97
3391	Medical Equipment and Supplies Manufacturing	0.25	94.22
2361	Residential Building Construction	0.25	94.47
6241	Individual and Family Services	0.23	94.70
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.22	94.92
3254	Pharmaceutical and Medicine Manufacturing	0.20	95.12
4841	General Freight Trucking	0.20	95.33
5622	Waste Treatment and Disposal	0.20	95.53
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	0.20	95.73
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.19	95.92
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0.16	96.08
4442	Lawn and Garden Equipment and Supplies Stores	0.16	96.24
4539	Other Miscellaneous Store Retailers	0.16	96.40
3262	Rubber Product Manufacturing	0.16	96.55
3399	Other Miscellaneous Manufacturing	0.15	96.71
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0.15	96.86
2381	Foundation, Structure, and Building Exterior Contractors	0.14	97.00
3255	Paint, Coating, and Adhesive Manufacturing	0.14	97.13
3329	Other Fabricated Metal Product Manufacturing	0.13	97.26
4431	Electronics and Appliance Stores	0.12	97.37
8114	Personal and Household Goods Repair and Maintenance	0.11	97.48
5619	Other Support Services	0.11	97.59
3372	Office Furniture (including Fixtures) Manufacturing	0.11	97.70
2211	Electric Power Generation, Transmission and Distribution	0.10	97.80
3333	Commercial and Service Industry Machinery Manufacturing	0.10	97.90
5629	Remediation and Other Waste Management Services	0.10	98.00
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0.09	98.09
3335	Metalworking Machinery Manufacturing	0.08	98.17
2123	Nonmetallic Mineral Mining and Quarrying	0.08	98.25

NAICS Industry Group	NAICS Description	Percentage	Cumulative Percentage
4482	Shoe Stores	0.08	98.33
3312	Steel Product Manufacturing from Purchased Steel	0.08	98.40
3351	Electric Lighting Equipment Manufacturing	0.07	98.47
5221	Depository Credit Intermediation	0.07	98.55
3159	Apparel Accessories and Other Apparel Manufacturing	0.07	98.61
5419	Other Professional, Scientific, and Technical Services	0.06	98.67
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.06	98.73
5242	Agencies, Brokerages, and Other Insurance Related Activities	0.06	98.79
2383	Building Finishing Contractors	0.06	98.85
3344	Semiconductor and Other Electronic Component Manufacturing	0.05	98.90
5411	Legal Services	0.05	98.95
3323	Architectural and Structural Metals Manufacturing	0.05	99.00
	Balance of industries (49 industry groups)	0.86	100.00
	<i>TOTAL - \$1,151,098,221</i>		

Source: See Table 2.1.

The resulting percentage weights from these NAICS Sub-sectors, Groups, and Industries are used below in Chapter III to calculate average M/WBE availability figures for Construction, Professional Services, Nonprofessional Services and Commodities.⁴²

⁴² After re-normalizing the percentage weights to sum to 100.

III. M/WBE Availability in the City of Austin's Market Area

A. Introduction

Estimates of M/WBE availability are an important element of the City of Austin's disparity study since they provide benchmarks for assessing the effectiveness of its efforts to encourage M/WBE participation in public contracting and procurement. Furthermore, they provide a means by which to establish overall goals as well as contract-level goals for M/WBE participation that are tailored to its relevant market area.

Many approaches to estimating availability suffer from internal inconsistency since the data employed to construct the availability numerator (*i.e.*, the total number of M/WBE establishments in the market area) are measured differently than the data employed to construct the availability denominator (*i.e.*, the total number of establishments in the market area). For example, the numerator might be drawn from an agency's internal list of certified M/WBEs while the denominator might be drawn from Census data. Since the methods used to identify and certify firms as M/WBEs are different from the methods used by the Census Bureau to count business establishments, such approaches inevitably compare "apples to oranges."

For this Study, we measure availability using an approach that ensures an "apples to apples" comparison between the availability numerator and denominator. This "Custom Census" method was pioneered by NERA and has been favorably reviewed by each court that has examined it to date. The Tenth Circuit found the custom census approach to be "a more sophisticated method to calculate availability than the earlier studies [by the other consultant in this case]."⁴³ Likewise, this method was successful in the defense of the DBE programs for Minnesota DOT⁴⁴ and Illinois DOT,⁴⁵ the M/WBE construction program for the City of Chicago,⁴⁶ and, most recently, in the successful defense of a DBE program challenge to U.S. DOT, the Illinois DOT, and the Illinois State Toll Highway Authority.⁴⁷

In addition to its favorable reception in the courts, when properly executed, the Custom Census method is superior to other approaches for at least three reasons. First, as already mentioned, it provides an internally consistent and rigorous "apples to apples" comparison between establishments in the availability numerator and those in the denominator. Second, it comports with the remedial nature of most M/WBE policies by measuring overall M/WBE availability in the relevant market area as opposed to only those businesses currently certified by an agency.⁴⁸

⁴³ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 966 (10th Cir. 2003) ("*Concrete Works IV*"), *cert. denied*, 540 U.S. 1027 (2003).

⁴⁴ *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

⁴⁵ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7th Cir. 2007).

⁴⁶ *Builders Ass'n of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725 (N.D. Ill. 2003).

⁴⁷ *Midwest Fence Corp. v. United States Department of Transportation, et al.*, 2015 U.S. Dist. Lexis 36277 (N.D. Ill. Mar. 24, 2015).

⁴⁸ *See Northern Contracting*, 473 F.3d at 723 ("We agree with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net.").

Third, a properly executed Custom Census is less likely to be tainted by the effects of past and present discrimination than other methods.⁴⁹ For this Study, we have expanded the Custom Census method in order to provide availability estimates for VOBs and SDVOBs as well.

The Custom Census method has seven steps. These are:

1. Create a database of representative and recent City of Austin contracts in Construction, Professional Services, Nonprofessional Services and Commodities;
2. Identify the City of Austin's relevant geographic market from this database;
3. Identify the City of Austin's relevant product market from this database;
4. Count all business establishments in the relevant market area;
5. Identify listed M/WBE, VOB and SDVOB establishments in the relevant market area;
6. Verify the ownership status of listed M/WBEs, VOBs and SDVOBs; and
7. Verify the ownership status of all other firms in the relevant market area.

Steps 1-3 were described above in Chapter II. Steps 4-7 are described in more detail below.

B. Identifying Business Establishments in the Relevant Markets

M/WBE (or VOB or SDVOB) availability (unweighted) is defined as the number of M/WBEs (or VOBs or SDVOBs) divided by the total number of business establishments in the City of Austin's contracting market area—what we will refer to as the Baseline Business Universe.⁵⁰ Determining the total number of business establishments in the market area, however, is a less complex task than determining the number of minority- or women-owned establishments in those markets. The latter has three main parts: (1) identify all listed M/WBEs (or VOBs or SDVOBs) in the relevant market; (2) verify the ownership status of listed M/WBEs (or VOBs or SDVOBs); and (3) estimate the number of unlisted M/WBEs (or VOBs or SDVOBs) in the relevant market. This section describes how these tasks were accomplished for the City of Austin.

It is important to note that NERA's availability analysis is free from variables tainted by discrimination. Our approach recognizes that discrimination may impact many of the variables that contribute to a firm's success in obtaining work as a prime or a subcontractor. Factors such as firm size, time in business, qualifications, and experience are all adversely affected by discrimination if it is present in the market area. Despite the obvious relationship, some

⁴⁹ See Section B.5., below, for further discussion of this point.

⁵⁰ To yield a percentage, the resulting figure is multiplied by 100.

commentators argue that disparities should only be assessed between firms with similar “capacities.”⁵¹

However, some courts have properly refused to make the results of discrimination the benchmark for non-discrimination.⁵² They have acknowledged that M/WBEs may be smaller, newer, and otherwise less competitive than non-M/WBEs because of the very discrimination sought to be remedied by race-conscious contracting programs. Racial and gender differences in these “capacity” factors are the *outcomes* of discrimination and it is therefore inappropriate as a matter of economics and statistics to use them as “control” variables in a disparity study.⁵³

1. Estimate the Total Number of Business Establishments in the Market

We used data supplied by Dun & Bradstreet to determine the total number of business establishments operating in the relevant geographic and product markets (these markets were discussed in the previous chapter). Dun & Bradstreet produces the most comprehensive publicly available database of business establishments in the U.S. This database contains over 18 million records and is updated continuously. Each record in Dun & Bradstreet represents a business establishment and includes the business name, address, telephone number, NAICS code, SIC code, business type, DUNS Number (a unique number assigned to each establishment by Dun & Bradstreet), and other descriptive information. Dun & Bradstreet gathers and verifies information from many different sources. These sources include, among others, annual management interviews, payment experiences, bank account information, filings for suits, liens, judgments and bankruptcies, news items, the U.S. Postal Service, utility and telephone service, business registrations, corporate charters, Uniform Commercial Code filings, and records of the Small Business Administration and other governmental agencies.

We used the Dun & Bradstreet database to identify the total number of businesses in each NAICS code that was identified as part of the City of Austin product market. Table 3.1 shows the number of businesses identified in each NAICS Industry Group within the Construction category, along with the associated industry weight according to dollars awarded. Comparable

⁵¹ See, e.g., *La Noue* (2006). Most of La Noue’s expert report in *Gross Seed Company v. Nebraska Department of Roads*, No. 02-3016 (D. Neb. 2002), including his views on “capacity,” was rejected by the court on the basis that it was legal opinion and not expert analysis. According to the court, “[legal analysis] is an issue solely for the Court and not for the presentation of expert testimony....” (see Defendants-Appellees’ Brief, *Gross Seed Company v. Nebraska Department of Roads*, on appeal to the Eighth Circuit Court of Appeals).

⁵² *North Shore Concrete and Assoc., Inc. v. City of New York*, No. 94-CV-4017, 1998 WL 273027 at *24-31 (E.D.N.Y. April 12, 1998); *Concrete Works of Colorado, Inc. v. City and County of Denver, et al.*, 321 F.3d 950, 981, 983 (10th Cir. 2003), *cert. denied*, 124 S.Ct. 556 (2003) (“MWBE construction firms are generally smaller and less experienced *because* of discrimination.... Additionally, we do not read *Crosen* to require disparity studies that measure whether construction firms are able to perform a *particular contract*.” (emphasis in the originals)). See also *Northern Contracting, Inc. v. State of Illinois, et al.*, 473 F.3d 715, 723 (7th Cir. 2007) (“We agree with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net [than a simple count of the number of registered and prequalified DBEs].”); and *Midwest Fence*, 2015 U.S. Lexis 36277 at *60-61.

⁵³ *Concrete Works*, 321 F.3d at 981 (emphasis in the original). See also Wainwright and Holt (2010), Appendix B “Understanding Capacity,” and Section B.5, below.

data for Professional Services, Nonprofessional Services and Commodities appear in Tables 3.2 through 3.4.⁵⁴

Although numerous industries are represented in the City of Austin Baseline Business Universe, contracting and subcontracting opportunities are not distributed evenly among them. Indeed, the distribution of contract expenditures is quite skewed, as documented above in Chapter II.

Table 3.1. Construction—Number of Establishments and Industry Weight, by NAICS Code

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
2371	Utility System Construction	135	26.37	26.37
2373	Highway, Street, and Bridge Construction	147	15.23	41.60
2362	Nonresidential Building Construction	398	11.90	53.50
2379	Other Heavy and Civil Engineering Construction	51	7.91	61.41
2382	Building Equipment Contractors	1,729	7.49	68.91
2381	Foundation, Structure, and Building Exterior Contractors	842	6.69	75.60
4841	General Freight Trucking	732	2.67	78.27
2389	Other Specialty Trade Contractors	1,008	2.47	80.74
5629	Remediation and Other Waste Management Services	60	1.87	82.61
3273	Cement and Concrete Product Manufacturing	50	1.39	84.00
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	472	1.18	85.18
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	102	1.17	86.35
5413	Architectural, Engineering, and Related Services	1,631	1.16	87.51
3342	Communications Equipment Manufacturing	23	1.09	88.60
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	79	0.99	89.60
5617	Services to Buildings and Dwellings	667	0.96	90.56
2361	Residential Building Construction	2,995	0.95	91.51
2383	Building Finishing Contractors	744	0.82	92.33
4247	Petroleum and Petroleum Products Merchant Wholesalers	78	0.67	92.99
8134	Civic and Social Organizations	1,116	0.60	93.59
3323	Architectural and Structural Metals Manufacturing	47	0.59	94.18
3312	Steel Product Manufacturing from Purchased Steel	3	0.53	94.71
2213	Water, Sewage and Other Systems	109	0.48	95.19
5613	Employment Services	149	0.42	95.61
3399	Other Miscellaneous Manufacturing	343	0.42	96.03
3329	Other Fabricated Metal Product Manufacturing	33	0.42	96.44
4233	Lumber and Other Construction Materials Merchant Wholesalers	225	0.33	96.77
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	18	0.28	97.05
3333	Commercial and Service Industry Machinery Manufacturing	41	0.28	97.33

⁵⁴ Analogous sets of weights using paid dollars, were also produced. They are similar and not published here due to space considerations.

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NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
8112	Electronic and Precision Equipment Repair and Maintenance	67	0.26	97.59
5419	Other Professional, Scientific, and Technical Services	3,808	0.20	97.79
3353	Electrical Equipment Manufacturing	14	0.20	97.99
4471	Gasoline Stations	197	0.19	98.17
6242	Community Food and Housing, and Emergency and Other Relief Services	8	0.17	98.34
5415	Computer Systems Design and Related Services	915	0.17	98.51
5616	Investigation and Security Services	249	0.15	98.66
3255	Paint, Coating, and Adhesive Manufacturing	12	0.14	98.80
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	176	0.11	98.91
5416	Management, Scientific, and Technical Consulting Services	169	0.11	99.02
5321	Automotive Equipment Rental and Leasing	10	0.10	99.12
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	108	0.10	99.21
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	312	0.09	99.30
3241	Petroleum and Coal Products Manufacturing	1	0.08	99.39
4842	Specialized Freight Trucking	34	0.08	99.47
5239	Other Financial Investment Activities	1,652	0.08	99.55
3331	Agriculture, Construction, and Mining Machinery Manufacturing	13	0.08	99.63
4441	Building Material and Supplies Dealers	206	0.07	99.70
5619	Other Support Services	10,033	0.06	99.77
4543	Direct Selling Establishments	39	0.06	99.83
3274	Lime and Gypsum Product Manufacturing	2	0.04	99.87
5241	Insurance Carriers	134	0.04	99.91

Source: Dun & Bradstreet/Hoovers; M/WBE business directory information compiled by NERA; Master Contract/Subcontract Database. Notes: (1) The dollar-based industry weight and cumulative industry weight are expressed as percentages; (2) Cumulative percentages do not sum to 100 because NAICS 326122 (Plastics pipe and pipe manufacturing) does not have any establishments in the Austin market area.

Table 3.2. Professional Services—Number of Establishments and Industry Weight, by NAICS Code

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
5413	Architectural, Engineering, and Related Services	2,083	53.56	53.56
2362	Nonresidential Building Construction	398	25.18	78.74
2382	Building Equipment Contractors	1,715	4.18	82.93
5416	Management, Scientific, and Technical Consulting Services	3,889	3.82	86.75
2371	Utility System Construction	117	2.27	89.01
2379	Other Heavy and Civil Engineering Construction	51	1.17	90.19
2389	Other Specialty Trade Contractors	1,008	0.98	91.16
5411	Legal Services	2,733	0.91	92.08
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	102	0.91	92.99
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	467	0.71	93.70
5613	Employment Services	334	0.65	94.35
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	108	0.60	94.96
2381	Foundation, Structure, and Building Exterior Contractors	643	0.56	95.52
2361	Residential Building Construction	2,341	0.50	96.01
2383	Building Finishing Contractors	666	0.37	96.38
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	79	0.36	96.74
2373	Highway, Street, and Bridge Construction	147	0.25	96.99
5629	Remediation and Other Waste Management Services	7	0.25	97.24
4239	Miscellaneous Durable Goods Merchant Wholesalers	56	0.24	97.48
3323	Architectural and Structural Metals Manufacturing	40	0.23	97.70
4841	General Freight Trucking	732	0.21	97.91
5239	Other Financial Investment Activities	93	0.20	98.11
4233	Lumber and Other Construction Materials Merchant Wholesalers	28	0.19	98.30
8114	Personal and Household Goods Repair and Maintenance	429	0.18	98.48
2372	Land Subdivision	247	0.16	98.64
5616	Investigation and Security Services	133	0.15	98.79
5418	Advertising, Public Relations, and Related Services	179	0.14	98.93
5242	Agencies, Brokerages, and Other Insurance Related Activities	1,162	0.14	99.06
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	8	0.11	99.17
3231	Printing and Related Support Activities	320	0.10	99.27
6241	Individual and Family Services	70	0.09	99.36
4543	Direct Selling Establishments	39	0.08	99.45
5617	Services to Buildings and Dwellings	667	0.07	99.52
5611	Office Administrative Services	1,378	0.07	99.59
5414	Specialized Design Services	353	0.06	99.65
5415	Computer Systems Design and Related Services	775	0.06	99.71
5614	Business Support Services	42	0.06	99.77
3311	Iron and Steel Mills and Ferroalloy Manufacturing	6	0.06	99.83
5619	Other Support Services	10,033	0.05	99.87

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NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
7121	Museums, Historical Sites, and Similar Institutions	9	0.04	99.92
3273	Cement and Concrete Product Manufacturing	23	0.04	99.96
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	176	0.04	100.00

Source: See Table 3.1. Note: The dollar-based industry weight and cumulative industry weight are expressed as percentages.

Table 3.3. Nonprofessional Services—Number of Establishments and Industry Weight, by NAICS Code

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
5241	Insurance Carriers	219	12.42	12.42
2362	Nonresidential Building Construction	398	8.19	20.61
5614	Business Support Services	3,887	5.78	26.39
2382	Building Equipment Contractors	1,729	5.01	31.40
5617	Services to Buildings and Dwellings	1,400	4.17	35.56
5415	Computer Systems Design and Related Services	1,722	4.10	39.67
5413	Architectural, Engineering, and Related Services	2,077	3.71	43.38
5242	Agencies, Brokerages, and Other Insurance Related Activities	1,188	3.68	47.06
5418	Advertising, Public Relations, and Related Services	362	3.36	50.42
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	82	2.92	53.34
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	327	1.99	55.33
5416	Management, Scientific, and Technical Consulting Services	3,974	1.97	57.30
8129	Other Personal Services	204	1.89	59.20
6242	Community Food and Housing, and Emergency and Other Relief Services	19	1.78	60.98
5112	Software Publishers	420	1.76	62.74
5613	Employment Services	334	1.61	64.35
6241	Individual and Family Services	803	1.60	65.95
5616	Investigation and Security Services	249	1.55	67.50
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	176	1.48	68.99
5179	Other Telecommunications	710	1.47	70.45
3351	Electric Lighting Equipment Manufacturing	9	1.44	71.89
5223	Activities Related to Credit Intermediation	78	1.43	73.32
5621	Waste Collection	11	1.31	74.63
5622	Waste Treatment and Disposal	34	1.30	75.93
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	295	1.14	77.07
2373	Highway, Street, and Bridge Construction	147	1.07	78.14
3341	Computer and Peripheral Equipment Manufacturing	76	1.04	79.18
8139	Business, Professional, Labor, Political, and Similar Organizations	223	1.04	80.22
2381	Foundation, Structure, and Building Exterior Contractors	682	1.00	81.21
8131	Religious Organizations	1,663	0.96	82.17
2371	Utility System Construction	135	0.91	83.08
2389	Other Specialty Trade Contractors	1,008	0.90	83.99
6243	Vocational Rehabilitation Services	94	0.89	84.88
5629	Remediation and Other Waste Management Services	108	0.75	85.63
5172	Wireless Telecommunications Carriers (except Satellite)	141	0.71	86.35
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	443	0.71	87.06
2361	Residential Building Construction	2,995	0.71	87.77

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NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	492	0.67	88.44
3342	Communications Equipment Manufacturing	23	0.59	89.03
8111	Automotive Repair and Maintenance	1,315	0.55	89.58
2383	Building Finishing Contractors	744	0.50	90.08
6211	Offices of Physicians	2,128	0.50	90.58
2379	Other Heavy and Civil Engineering Construction	51	0.49	91.07
3323	Architectural and Structural Metals Manufacturing	40	0.46	91.53
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	3	0.43	91.96
6116	Other Schools and Instruction	316	0.43	92.39
3344	Semiconductor and Other Electronic Component Manufacturing	110	0.42	92.80
3259	Other Chemical Product and Preparation Manufacturing	16	0.39	93.20
4242	Drugs and Druggists' Sundries Merchant Wholesalers	43	0.32	93.52
5151	Radio and Television Broadcasting	26	0.31	93.83
5419	Other Professional, Scientific, and Technical Services	3,802	0.29	94.12
4239	Miscellaneous Durable Goods Merchant Wholesalers	343	0.27	94.38
2372	Land Subdivision	247	0.25	94.63
3339	Other General Purpose Machinery Manufacturing	2	0.25	94.89
5411	Legal Services	2,733	0.23	95.12
2211	Electric Power Generation, Transmission and Distribution	50	0.23	95.35
5321	Automotive Equipment Rental and Leasing	59	0.21	95.56
4841	General Freight Trucking	732	0.21	95.77
6213	Offices of Other Health Practitioners	511	0.21	95.98
6231	Nursing Care Facilities (Skilled Nursing Facilities)	141	0.19	96.17
6244	Child Day Care Services	768	0.18	96.35
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	63	0.17	96.52
4413	Automotive Parts, Accessories, and Tire Stores	142	0.16	96.68
4247	Petroleum and Petroleum Products Merchant Wholesalers	78	0.15	96.83
4471	Gasoline Stations	197	0.15	96.99
7223	Special Food Services	235	0.15	97.13
8133	Social Advocacy Organizations	138	0.15	97.28
6215	Medical and Diagnostic Laboratories	76	0.14	97.42
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	147	0.14	97.55
5221	Depository Credit Intermediation	459	0.12	97.67
3231	Printing and Related Support Activities	320	0.12	97.79
4521	Department Stores	97	0.12	97.91
3331	Agriculture, Construction, and Mining Machinery Manufacturing	13	0.12	98.03
4233	Lumber and Other Construction Materials Merchant Wholesalers	108	0.11	98.14
4884	Support Activities for Road Transportation	105	0.11	98.25
4543	Direct Selling Establishments	331	0.10	98.35
4246	Chemical and Allied Products Merchant Wholesalers	62	0.09	98.44
8123	Drycleaning and Laundry Services	10	0.09	98.53
3353	Electrical Equipment Manufacturing	21	0.09	98.62

M/WBE Availability in the City of Austin's Market Area

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
4881	Support Activities for Air Transportation	79	0.07	98.69
8134	Civic and Social Organizations	1,116	0.07	98.76
4431	Electronics and Appliance Stores	719	0.07	98.83
8132	Grantmaking and Giving Services	18	0.07	98.90
4411	Automobile Dealers	256	0.06	98.96
6221	General Medical and Surgical Hospitals	65	0.06	99.02
5311	Lessors of Real Estate	117	0.06	99.08
4232	Furniture and Home Furnishing Merchant Wholesalers	84	0.06	99.14
5152	Cable and Other Subscription Programming	65	0.05	99.19
4842	Specialized Freight Trucking	55	0.05	99.24
1114	Greenhouse, Nursery, and Floriculture Production	11	0.05	99.29
8122	Death Care Services	45	0.05	99.34
3364	Aerospace Product and Parts Manufacturing	9	0.04	99.39
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	79	0.04	99.43
3391	Medical Equipment and Supplies Manufacturing	29	0.04	99.47
6239	Other Residential Care Facilities	57	0.04	99.51
7121	Museums, Historical Sites, and Similar Institutions	123	0.04	99.55
8112	Electronic and Precision Equipment Repair and Maintenance	67	0.04	99.58
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	12	0.04	99.62
5414	Specialized Design Services	353	0.03	99.66
7139	Other Amusement and Recreation Industries	859	0.03	99.69
4241	Paper and Paper Product Merchant Wholesalers	53	0.03	99.72
6114	Business Schools and Computer and Management Training	22	0.03	99.75
3333	Commercial and Service Industry Machinery Manufacturing	41	0.03	99.78
3222	Converted Paper Product Manufacturing	4	0.03	99.81
7225	Restaurants and Other Eating Places	2,372	0.03	99.84
2213	Water, Sewage and Other Systems	109	0.03	99.87
5313	Activities Related to Real Estate	147	0.03	99.89
4541	Electronic Shopping and Mail-Order Houses	1	0.03	99.92
3262	Rubber Product Manufacturing	1	0.03	99.95
3311	Iron and Steel Mills and Ferroalloy Manufacturing	6	0.03	99.97
5222	Nondepository Credit Intermediation	159	0.03	100.00

Source: See Table 3.1. Note: The dollar-based industry weight and cumulative industry weight are expressed as percentages.

Table 3.4. Commodities—Number of Establishments and Industry Weight, by NAICS Code

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	295	9.89	9.89
4247	Petroleum and Petroleum Products Merchant Wholesalers	84	8.50	18.40
2371	Utility System Construction	135	6.13	24.53
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	492	5.72	30.25
4411	Automobile Dealers	256	5.14	35.39
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	160	4.52	39.92
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	442	3.46	43.37
2362	Nonresidential Building Construction	398	3.32	46.69
3342	Communications Equipment Manufacturing	37	3.17	49.86
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	3	3.05	52.91
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	120	3.02	55.93
2382	Building Equipment Contractors	1,715	2.89	58.82
5416	Management, Scientific, and Technical Consulting Services	4,143	2.64	61.46
5415	Computer Systems Design and Related Services	1,690	2.52	63.98
3341	Computer and Peripheral Equipment Manufacturing	76	2.21	66.19
3353	Electrical Equipment Manufacturing	30	2.20	68.39
2373	Highway, Street, and Bridge Construction	147	2.06	70.45
3241	Petroleum and Coal Products Manufacturing	11	1.80	72.25
3261	Plastics Product Manufacturing	35	1.74	73.98
3211	Sawmills and Wood Preservation	7	1.65	75.63
4232	Furniture and Home Furnishing Merchant Wholesalers	228	1.61	77.24
3274	Lime and Gypsum Product Manufacturing	2	1.44	78.69
5413	Architectural, Engineering, and Related Services	927	1.36	80.05
3362	Motor Vehicle Body and Trailer Manufacturing	1	1.24	81.29
4246	Chemical and Allied Products Merchant Wholesalers	62	1.22	82.52
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	202	1.06	83.57
5112	Software Publishers	420	0.89	84.47
4241	Paper and Paper Product Merchant Wholesalers	77	0.82	85.29
4532	Office Supplies, Stationery, and Gift Stores	64	0.78	86.07
4233	Lumber and Other Construction Materials Merchant Wholesalers	205	0.74	86.81
5179	Other Telecommunications	96	0.70	87.51
4543	Direct Selling Establishments	331	0.60	88.11
3251	Basic Chemical Manufacturing	37	0.58	88.69
4413	Automotive Parts, Accessories, and Tire Stores	347	0.56	89.24
5614	Business Support Services	6	0.53	89.78
3259	Other Chemical Product and Preparation Manufacturing	16	0.45	90.22
3364	Aerospace Product and Parts Manufacturing	16	0.42	90.64
3339	Other General Purpose Machinery Manufacturing	22	0.42	91.06
4481	Clothing Stores	655	0.40	91.46

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NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	186	0.38	91.84
5239	Other Financial Investment Activities	1,652	0.37	92.21
8111	Automotive Repair and Maintenance	986	0.35	92.56
4239	Miscellaneous Durable Goods Merchant Wholesalers	381	0.29	92.85
3359	Other Electrical Equipment and Component Manufacturing	46	0.29	93.14
2389	Other Specialty Trade Contractors	866	0.27	93.41
4541	Electronic Shopping and Mail-Order Houses	92	0.27	93.68
3273	Cement and Concrete Product Manufacturing	24	0.27	93.95
4441	Building Material and Supplies Dealers	190	0.26	94.21
3391	Medical Equipment and Supplies Manufacturing	51	0.25	94.46
2361	Residential Building Construction	2,341	0.25	94.71
6241	Individual and Family Services	673	0.23	94.93
3331	Agriculture, Construction, and Mining Machinery Manufacturing	23	0.22	95.15
4841	General Freight Trucking	732	0.21	95.36
5622	Waste Treatment and Disposal	16	0.21	95.56
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	79	0.19	95.75
3254	Pharmaceutical and Medicine Manufacturing	29	0.19	95.94
4442	Lawn and Garden Equipment and Supplies Stores	11	0.16	96.10
4539	Other Miscellaneous Store Retailers	1,282	0.16	96.26
3262	Rubber Product Manufacturing	1	0.16	96.42
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	4	0.15	96.56
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	5	0.14	96.71
2381	Foundation, Structure, and Building Exterior Contractors	371	0.14	96.84
3255	Paint, Coating, and Adhesive Manufacturing	12	0.14	96.98
4431	Electronics and Appliance Stores	719	0.12	97.10
3329	Other Fabricated Metal Product Manufacturing	6	0.11	97.21
8114	Personal and Household Goods Repair and Maintenance	627	0.11	97.32
5619	Other Support Services	10,033	0.11	97.44
3399	Other Miscellaneous Manufacturing	54	0.10	97.54
2211	Electric Power Generation, Transmission and Distribution	50	0.10	97.64
5629	Remediation and Other Waste Management Services	47	0.09	97.73
3372	Office Furniture (including Fixtures) Manufacturing	6	0.09	97.82
3333	Commercial and Service Industry Machinery Manufacturing	41	0.09	97.91
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	312	0.09	97.99
3335	Metalworking Machinery Manufacturing	4	0.08	98.08
4482	Shoe Stores	134	0.08	98.15
3312	Steel Product Manufacturing from Purchased Steel	3	0.08	98.23
3351	Electric Lighting Equipment Manufacturing	21	0.07	98.30
5221	Depository Credit Intermediation	391	0.07	98.37
3159	Apparel Accessories and Other Apparel Manufacturing	12	0.07	98.44
2123	Nonmetallic Mineral Mining and Quarrying	7	0.07	98.51

NAICS Code	NAICS Description	Number of Establishments	Industry Weight	Cumulative Industry Weight
3361	Motor Vehicle Manufacturing	6	0.06	98.57
5419	Other Professional, Scientific, and Technical Services	3,639	0.06	98.63
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	443	0.06	98.69
5242	Agencies, Brokerages, and Other Insurance Related Activities	1,162	0.06	98.75
3344	Semiconductor and Other Electronic Component Manufacturing	7	0.05	98.80
8112	Electronic and Precision Equipment Repair and Maintenance	67	0.05	98.85
5411	Legal Services	57	0.05	98.90
3321	Forging and Stamping	9	0.05	98.94
5617	Services to Buildings and Dwellings	667	0.04	98.99
4242	Drugs and Druggists' Sundries Merchant Wholesalers	43	0.04	99.03
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	46	0.04	99.07
3366	Ship and Boat Building	6	0.04	99.11
4512	Book Stores and News Dealers	113	0.04	99.15
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	7	0.03	99.18
5311	Lessors of Real Estate	967	0.03	99.22
3323	Architectural and Structural Metals Manufacturing	7	0.03	99.25
4881	Support Activities for Air Transportation	79	0.03	99.28
4412	Other Motor Vehicle Dealers	179	0.03	99.31
5414	Specialized Design Services	359	0.03	99.34
2383	Building Finishing Contractors	171	0.03	99.37
2131	Support Activities for Mining	158	0.03	99.40
2212	Natural Gas Distribution	16	0.03	99.42

Source: See Table 3.1. Notes: (1) The dollar-based industry weight and cumulative industry weight are expressed as percentages; (2) Cumulative percentages do not sum to 100 because NAICS 325312 (Phosphatic fertilizer manufacturing), 336112 (Light truck and utility vehicle manufacturing), and 423620 (Household appliances, electric housewares, and consumer electronics merchant wholesalers) do not have any establishments in the Austin market area.

2. Identify Listed M/WBEs, VOBs and SDVOBs

While extensive, Dun & Bradstreet does not sufficiently identify all businesses owned by minorities or women. Although many such businesses *are* correctly identified in Dun & Bradstreet, experience has demonstrated that many are also missed. Furthermore, Dun & Bradstreet does not contain any identifiers for VOBs or SDVOBs. For these reasons, several additional steps were required to identify the appropriate percentage of M/WBEs, VOBs and SDVOBs in the relevant market.

First, NERA completed an intensive regional search for information on minority-owned, woman-owned, and veteran-owned businesses in Austin and surrounding counties. Beyond the information already in Dun & Bradstreet/Hoover's, NERA collected lists of M/WBEs from numerous other public and private entities. Specifically, directories were included from: Asian Contractors Association, Austin Asian Contractors Association, Austin Black Contractors

Association, Austin Business Journal, Black Owned Business Network, the Black Registry, City of Austin, Colorado County, DiversityBusiness.com, Diversity Information Resources, State of Texas Centralized Master Bidders List, Minority Business Development Agency, National Association of Women in Construction, National Women Business Owners Corporation, Rogers-O'Brien Construction, Small Business Administration, Southwest Minority Supplier Development Council, United States Hispanic Contractors Association de Austin, U.S. Women's Chamber of Commerce, Women's Business Enterprise Alliance.⁵⁵

Few directories specifically identify VOBs or SDVOBs. The primary source available is Vetbiz.gov, a centralized national registry for VOBs and SDVOBs maintained by the U.S. Department of Veterans Affairs. In addition to Vetbiz.gov, however, several other directories track VOBs and/or SDVOBs in addition to tracking M/WBEs. These lists include those from the Small Business Administration, the Minority Business Development Agency and DiversityBusiness.com. We included all records from these sources in the City of Austin market area in our master directory.

Tables 3.5 through 3.8 show the listed M/WBEs in Construction, Professional Services, Nonprofessional Services and Commodities, respectively. Tables 3.5A through 3.8A show comparable information for VOBs, and Tables 3.5B through 3.8B show comparable information for SDVOBs.

If the listed M/WBEs identified in Tables 3.5 through 3.8 are in fact *all* M/WBEs and are the *only* M/WBEs among all of the establishments in the relevant market identified in Tables 3.1 through 3.4, then an estimate of "listed" M/WBE availability is simply the number of listed M/WBEs divided by the total number of establishments in the relevant market. However, as we shall see below, neither of these two conditions holds true in practice and this is therefore *not* an appropriate method for measuring M/WBE availability. The same applies to VOBs in Tables 3.5A through 3.8A and SDVOBs in Tables 3.5B through 3.8B.

There are two reasons for this. First, it is likely that some proportion of the M/WBEs listed in the tables is not actually minority-owned or women-owned, and that some proportion of the VOBs and SDVOBs listed in the tables is not actually veteran-owned. Second, it is likely that there are additional "unlisted" M/WBEs and VOBs and SDVOBs among all of the establishments included in Tables 3.1 through 3.4. Such businesses do not appear in any of the directories we gathered and are therefore not included as M/WBEs or VOBs or SDVOBs in these tables. Additional steps are required to test these two conditions and to arrive at a more accurate representation of M/WBE, VOB and SDVOB availability within the Baseline Business Universe. We discuss these steps below in Sections 3.a and 3.b.

⁵⁵ We also obtained information from certain entities that was duplicative of either Dun & Bradstreet or one or more of the other sources listed above. These entities are listed below in Appendix A. We were unable to obtain relevant lists or directories from a number of entities. The reasons for this include: (1) the entity did not have a list or the entity's list did not include race and sex information; (2) the entity was unresponsive to repeated attempts at contacts; or (3) the entity simply declined to provide us the list. These entities, as well, are listed in Appendix A.

Table 3.5. Construction—Number of Listed M/WBE Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
2371	Utility System Construction	26	26.37	26.37
2373	Highway, Street, and Bridge Construction	37	15.23	41.60
2362	Nonresidential Building Construction	87	11.90	53.50
2379	Other Heavy and Civil Engineering Construction	9	7.91	61.41
2382	Building Equipment Contractors	181	7.49	68.91
2381	Foundation, Structure, and Building Exterior Contractors	100	6.69	75.60
4841	General Freight Trucking	75	2.67	78.27
2389	Other Specialty Trade Contractors	84	2.47	80.74
5629	Remediation and Other Waste Management Services	13	1.87	82.61
3273	Cement and Concrete Product Manufacturing	3	1.39	84.00
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	58	1.18	85.18
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	14	1.17	86.35
5413	Architectural, Engineering, and Related Services	270	1.16	87.51
3342	Communications Equipment Manufacturing	2	1.09	88.60
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	14	0.99	89.60
5617	Services to Buildings and Dwellings	50	0.96	90.56
2361	Residential Building Construction	142	0.95	91.51
2383	Building Finishing Contractors	72	0.82	92.33
4247	Petroleum and Petroleum Products Merchant Wholesalers	7	0.67	92.99
8134	Civic and Social Organizations	4	0.60	93.59
3323	Architectural and Structural Metals Manufacturing	6	0.59	94.18
3312	Steel Product Manufacturing from Purchased Steel	0	0.53	94.71
2213	Water, Sewage and Other Systems	5	0.48	95.19
5613	Employment Services	43	0.42	95.61
3399	Other Miscellaneous Manufacturing	43	0.42	96.03
3329	Other Fabricated Metal Product Manufacturing	6	0.42	96.44
4233	Lumber and Other Construction Materials Merchant Wholesalers	25	0.33	96.77
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	4	0.28	97.05
3333	Commercial and Service Industry Machinery Manufacturing	6	0.28	97.33
8112	Electronic and Precision Equipment Repair and Maintenance	10	0.26	97.59
5419	Other Professional, Scientific, and Technical Services	237	0.20	97.79
3353	Electrical Equipment Manufacturing	1	0.20	97.99
4471	Gasoline Stations	7	0.19	98.17
6242	Community Food and Housing, and Emergency and Other Relief Services	1	0.17	98.34
5415	Computer Systems Design and Related Services	125	0.17	98.51
5616	Investigation and Security Services	31	0.15	98.66
3255	Paint, Coating, and Adhesive Manufacturing	2	0.14	98.80

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NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	15	0.11	98.91
5416	Management, Scientific, and Technical Consulting Services	38	0.11	99.02
5321	Automotive Equipment Rental and Leasing	2	0.10	99.12
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	15	0.10	99.21
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	11	0.09	99.30
3241	Petroleum and Coal Products Manufacturing	0	0.08	99.39
4842	Specialized Freight Trucking	6	0.08	99.47
5239	Other Financial Investment Activities	34	0.08	99.55
3331	Agriculture, Construction, and Mining Machinery Manufacturing	1	0.08	99.63
4441	Building Material and Supplies Dealers	12	0.07	99.70
5619	Other Support Services	209	0.06	99.77
4543	Direct Selling Establishments	6	0.06	99.83
3274	Lime and Gypsum Product Manufacturing	0	0.04	99.87
5241	Insurance Carriers	4	0.04	99.91

Source and Notes: See Table 3.1.

Table 3.5A. Construction—Number of Listed VOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
2371	Utility System Construction	0	26.37	26.37
2373	Highway, Street, and Bridge Construction	0	15.23	41.60
2362	Nonresidential Building Construction	14	11.90	53.50
2379	Other Heavy and Civil Engineering Construction	0	7.91	61.41
2382	Building Equipment Contractors	8	7.49	68.91
2381	Foundation, Structure, and Building Exterior Contractors	4	6.69	75.60
4841	General Freight Trucking	0	2.67	78.27
2389	Other Specialty Trade Contractors	5	2.47	80.74
5629	Remediation and Other Waste Management Services	0	1.87	82.61
3273	Cement and Concrete Product Manufacturing	0	1.39	84.00
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	1.18	85.18
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	1.17	86.35
5413	Architectural, Engineering, and Related Services	14	1.16	87.51
3342	Communications Equipment Manufacturing	0	1.09	88.60
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.99	89.60
5617	Services to Buildings and Dwellings	0	0.96	90.56
2361	Residential Building Construction	4	0.95	91.51
2383	Building Finishing Contractors	2	0.82	92.33
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	0.67	92.99
8134	Civic and Social Organizations	2	0.60	93.59
3323	Architectural and Structural Metals Manufacturing	0	0.59	94.18
3312	Steel Product Manufacturing from Purchased Steel	0	0.53	94.71
2213	Water, Sewage and Other Systems	0	0.48	95.19
5613	Employment Services	1	0.42	95.61
3399	Other Miscellaneous Manufacturing	3	0.42	96.03
3329	Other Fabricated Metal Product Manufacturing	0	0.42	96.44
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.33	96.77
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	0.28	97.05
3333	Commercial and Service Industry Machinery Manufacturing	0	0.28	97.33
8112	Electronic and Precision Equipment Repair and Maintenance	1	0.26	97.59
5419	Other Professional, Scientific, and Technical Services	10	0.20	97.79
3353	Electrical Equipment Manufacturing	0	0.20	97.99
4471	Gasoline Stations	0	0.19	98.17
6242	Community Food and Housing, and Emergency and Other Relief Services	0	0.17	98.34
5415	Computer Systems Design and Related Services	6	0.17	98.51
5616	Investigation and Security Services	2	0.15	98.66
3255	Paint, Coating, and Adhesive Manufacturing	0	0.14	98.80

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NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	0.11	98.91
5416	Management, Scientific, and Technical Consulting Services	1	0.11	99.02
5321	Automotive Equipment Rental and Leasing	0	0.10	99.12
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	0.10	99.21
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0	0.09	99.30
3241	Petroleum and Coal Products Manufacturing	0	0.08	99.39
4842	Specialized Freight Trucking	0	0.08	99.47
5239	Other Financial Investment Activities	0	0.08	99.55
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.08	99.63
4441	Building Material and Supplies Dealers	0	0.07	99.70
5619	Other Support Services	6	0.06	99.77
4543	Direct Selling Establishments	0	0.06	99.83
3274	Lime and Gypsum Product Manufacturing	0	0.04	99.87
5241	Insurance Carriers	1	0.04	99.91

Source and Notes: See Table 3.1.

Table 3.5B. Construction—Number of Listed SDVOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
2371	Utility System Construction	0	26.37	26.37
2373	Highway, Street, and Bridge Construction	0	15.23	41.60
2362	Nonresidential Building Construction	8	11.90	53.50
2379	Other Heavy and Civil Engineering Construction	0	7.91	61.41
2382	Building Equipment Contractors	3	7.49	68.91
2381	Foundation, Structure, and Building Exterior Contractors	1	6.69	75.60
4841	General Freight Trucking	0	2.67	78.27
2389	Other Specialty Trade Contractors	0	2.47	80.74
5629	Remediation and Other Waste Management Services	0	1.87	82.61
3273	Cement and Concrete Product Manufacturing	0	1.39	84.00
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	1.18	85.18
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	1.17	86.35
5413	Architectural, Engineering, and Related Services	7	1.16	87.51
3342	Communications Equipment Manufacturing	0	1.09	88.60
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.99	89.60
5617	Services to Buildings and Dwellings	0	0.96	90.56
2361	Residential Building Construction	2	0.95	91.51
2383	Building Finishing Contractors	0	0.82	92.33
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	0.67	92.99
8134	Civic and Social Organizations	1	0.60	93.59
3323	Architectural and Structural Metals Manufacturing	0	0.59	94.18
3312	Steel Product Manufacturing from Purchased Steel	0	0.53	94.71
2213	Water, Sewage and Other Systems	0	0.48	95.19
5613	Employment Services	1	0.42	95.61
3399	Other Miscellaneous Manufacturing	0	0.42	96.03
3329	Other Fabricated Metal Product Manufacturing	0	0.42	96.44
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.33	96.77
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	0.28	97.05
3333	Commercial and Service Industry Machinery Manufacturing	0	0.28	97.33
8112	Electronic and Precision Equipment Repair and Maintenance	0	0.26	97.59
5419	Other Professional, Scientific, and Technical Services	4	0.20	97.79
3353	Electrical Equipment Manufacturing	0	0.20	97.99
4471	Gasoline Stations	0	0.19	98.17
6242	Community Food and Housing, and Emergency and Other Relief Services	0	0.17	98.34
5415	Computer Systems Design and Related Services	2	0.17	98.51
5616	Investigation and Security Services	0	0.15	98.66
3255	Paint, Coating, and Adhesive Manufacturing	0	0.14	98.80

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NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	0.11	98.91
5416	Management, Scientific, and Technical Consulting Services	1	0.11	99.02
5321	Automotive Equipment Rental and Leasing	0	0.10	99.12
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	0.10	99.21
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0	0.09	99.30
3241	Petroleum and Coal Products Manufacturing	0	0.08	99.39
4842	Specialized Freight Trucking	0	0.08	99.47
5239	Other Financial Investment Activities	0	0.08	99.55
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.08	99.63
4441	Building Material and Supplies Dealers	0	0.07	99.70
5619	Other Support Services	3	0.06	99.77
4543	Direct Selling Establishments	0	0.06	99.83
3274	Lime and Gypsum Product Manufacturing	0	0.04	99.87
5241	Insurance Carriers	1	0.04	99.91

Source and Notes: See Table 3.1.

Table 3.6. Professional Services—Number of Listed M/WBE Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
5413	Architectural, Engineering, and Related Services	348	53.56	53.56
2362	Nonresidential Building Construction	87	25.18	78.74
2382	Building Equipment Contractors	176	4.18	82.93
5416	Management, Scientific, and Technical Consulting Services	569	3.82	86.75
2371	Utility System Construction	22	2.27	89.01
2379	Other Heavy and Civil Engineering Construction	9	1.17	90.19
2389	Other Specialty Trade Contractors	84	0.98	91.16
5411	Legal Services	207	0.91	92.08
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	14	0.91	92.99
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	55	0.71	93.70
5613	Employment Services	79	0.65	94.35
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	15	0.60	94.96
2381	Foundation, Structure, and Building Exterior Contractors	87	0.56	95.52
2361	Residential Building Construction	100	0.50	96.01
2383	Building Finishing Contractors	66	0.37	96.38
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	14	0.36	96.74
2373	Highway, Street, and Bridge Construction	37	0.25	96.99
5629	Remediation and Other Waste Management Services	4	0.25	97.24
4239	Miscellaneous Durable Goods Merchant Wholesalers	4	0.24	97.48
3323	Architectural and Structural Metals Manufacturing	6	0.23	97.70
4841	General Freight Trucking	75	0.21	97.91
5239	Other Financial Investment Activities	3	0.20	98.11
4233	Lumber and Other Construction Materials Merchant Wholesalers	6	0.19	98.30
8114	Personal and Household Goods Repair and Maintenance	20	0.18	98.48
2372	Land Subdivision	4	0.16	98.64
5616	Investigation and Security Services	11	0.15	98.79
5418	Advertising, Public Relations, and Related Services	40	0.14	98.93
5242	Agencies, Brokerages, and Other Insurance Related Activities	106	0.14	99.06
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	0.11	99.17
3231	Printing and Related Support Activities	57	0.10	99.27
6241	Individual and Family Services	1	0.09	99.36
4543	Direct Selling Establishments	6	0.08	99.45
5617	Services to Buildings and Dwellings	50	0.07	99.52
5611	Office Administrative Services	54	0.07	99.59
5414	Specialized Design Services	116	0.06	99.65
5415	Computer Systems Design and Related Services	143	0.06	99.71
5614	Business Support Services	4	0.06	99.77

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NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.06	99.83
5619	Other Support Services	209	0.05	99.87
7121	Museums, Historical Sites, and Similar Institutions	2	0.04	99.92
3273	Cement and Concrete Product Manufacturing	3	0.04	99.96
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	15	0.04	100.00

Source and Notes: See Table 3.2.

Table 3.6A. Professional Services—Number of Listed VOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
5413	Architectural, Engineering, and Related Services	17	53.56	53.56
2362	Nonresidential Building Construction	14	25.18	78.74
2382	Building Equipment Contractors	8	4.18	82.93
5416	Management, Scientific, and Technical Consulting Services	22	3.82	86.75
2371	Utility System Construction	0	2.27	89.01
2379	Other Heavy and Civil Engineering Construction	0	1.17	90.19
2389	Other Specialty Trade Contractors	5	0.98	91.16
5411	Legal Services	0	0.91	92.08
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	0.91	92.99
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	0.71	93.70
5613	Employment Services	4	0.65	94.35
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	0.60	94.96
2381	Foundation, Structure, and Building Exterior Contractors	4	0.56	95.52
2361	Residential Building Construction	2	0.50	96.01
2383	Building Finishing Contractors	2	0.37	96.38
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.36	96.74
2373	Highway, Street, and Bridge Construction	0	0.25	96.99
5629	Remediation and Other Waste Management Services	0	0.25	97.24
4239	Miscellaneous Durable Goods Merchant Wholesalers	0	0.24	97.48
3323	Architectural and Structural Metals Manufacturing	0	0.23	97.70
4841	General Freight Trucking	0	0.21	97.91
5239	Other Financial Investment Activities	0	0.20	98.11
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.19	98.30
8114	Personal and Household Goods Repair and Maintenance	0	0.18	98.48
2372	Land Subdivision	0	0.16	98.64
5616	Investigation and Security Services	0	0.15	98.79
5418	Advertising, Public Relations, and Related Services	0	0.14	98.93
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	0.14	99.06
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	0.11	99.17
3231	Printing and Related Support Activities	0	0.10	99.27
6241	Individual and Family Services	0	0.09	99.36
4543	Direct Selling Establishments	0	0.08	99.45
5617	Services to Buildings and Dwellings	0	0.07	99.52
5611	Office Administrative Services	2	0.07	99.59
5414	Specialized Design Services	0	0.06	99.65
5415	Computer Systems Design and Related Services	4	0.06	99.71
5614	Business Support Services	0	0.06	99.77

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NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.06	99.83
5619	Other Support Services	6	0.05	99.87
7121	Museums, Historical Sites, and Similar Institutions	0	0.04	99.92
3273	Cement and Concrete Product Manufacturing	0	0.04	99.96
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	0.04	100.00

Source and Notes: See Table 3.2.

Table 3.6B. Professional Services—Number of Listed SDVOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
5413	Architectural, Engineering, and Related Services	10	53.56	53.56
2362	Nonresidential Building Construction	8	25.18	78.74
2382	Building Equipment Contractors	3	4.18	82.93
5416	Management, Scientific, and Technical Consulting Services	17	3.82	86.75
2371	Utility System Construction	0	2.27	89.01
2379	Other Heavy and Civil Engineering Construction	0	1.17	90.19
2389	Other Specialty Trade Contractors	0	0.98	91.16
5411	Legal Services	0	0.91	92.08
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	0.91	92.99
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	0.71	93.70
5613	Employment Services	3	0.65	94.35
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	0.60	94.96
2381	Foundation, Structure, and Building Exterior Contractors	1	0.56	95.52
2361	Residential Building Construction	1	0.50	96.01
2383	Building Finishing Contractors	0	0.37	96.38
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.36	96.74
2373	Highway, Street, and Bridge Construction	0	0.25	96.99
5629	Remediation and Other Waste Management Services	0	0.25	97.24
4239	Miscellaneous Durable Goods Merchant Wholesalers	0	0.24	97.48
3323	Architectural and Structural Metals Manufacturing	0	0.23	97.70
4841	General Freight Trucking	0	0.21	97.91
5239	Other Financial Investment Activities	0	0.20	98.11
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.19	98.30
8114	Personal and Household Goods Repair and Maintenance	0	0.18	98.48
2372	Land Subdivision	0	0.16	98.64
5616	Investigation and Security Services	0	0.15	98.79
5418	Advertising, Public Relations, and Related Services	0	0.14	98.93
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	0.14	99.06
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	0.11	99.17
3231	Printing and Related Support Activities	0	0.10	99.27
6241	Individual and Family Services	0	0.09	99.36
4543	Direct Selling Establishments	0	0.08	99.45
5617	Services to Buildings and Dwellings	0	0.07	99.52
5611	Office Administrative Services	2	0.07	99.59
5414	Specialized Design Services	0	0.06	99.65
5415	Computer Systems Design and Related Services	2	0.06	99.71
5614	Business Support Services	0	0.06	99.77

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NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.06	99.83
5619	Other Support Services	3	0.05	99.87
7121	Museums, Historical Sites, and Similar Institutions	0	0.04	99.92
3273	Cement and Concrete Product Manufacturing	0	0.04	99.96
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	0.04	100.00

Source and Notes: See Table 3.2.

Table 3.7. Nonprofessional Services—Number of Listed M/WBE Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
5241	Insurance Carriers	11	12.42	12.42
2362	Nonresidential Building Construction	87	8.19	20.61
5614	Business Support Services	199	5.78	26.39
2382	Building Equipment Contractors	181	5.01	31.40
5617	Services to Buildings and Dwellings	165	4.17	35.56
5415	Computer Systems Design and Related Services	273	4.10	39.67
5413	Architectural, Engineering, and Related Services	347	3.71	43.38
5242	Agencies, Brokerages, and Other Insurance Related Activities	106	3.68	47.06
5418	Advertising, Public Relations, and Related Services	89	3.36	50.42
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	11	2.92	53.34
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	46	1.99	55.33
5416	Management, Scientific, and Technical Consulting Services	591	1.97	57.30
8129	Other Personal Services	34	1.89	59.20
6242	Community Food and Housing, and Emergency and Other Relief Services	1	1.78	60.98
5112	Software Publishers	31	1.76	62.74
5613	Employment Services	79	1.61	64.35
6241	Individual and Family Services	10	1.60	65.95
5616	Investigation and Security Services	31	1.55	67.50
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	15	1.48	68.99
5179	Other Telecommunications	45	1.47	70.45
3351	Electric Lighting Equipment Manufacturing	1	1.44	71.89
5223	Activities Related to Credit Intermediation	3	1.43	73.32
5621	Waste Collection	1	1.31	74.63
5622	Waste Treatment and Disposal	1	1.30	75.93
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	42	1.14	77.07
2373	Highway, Street, and Bridge Construction	37	1.07	78.14
3341	Computer and Peripheral Equipment Manufacturing	15	1.04	79.18
8139	Business, Professional, Labor, Political, and Similar Organizations	3	1.04	80.22
2381	Foundation, Structure, and Building Exterior Contractors	96	1.00	81.21
8131	Religious Organizations	7	0.96	82.17
2371	Utility System Construction	26	0.91	83.08
2389	Other Specialty Trade Contractors	84	0.90	83.99
6243	Vocational Rehabilitation Services	9	0.89	84.88
5629	Remediation and Other Waste Management Services	11	0.75	85.63
5172	Wireless Telecommunications Carriers (except Satellite)	5	0.71	86.35

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	42	0.71	87.06
2361	Residential Building Construction	142	0.71	87.77
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	57	0.67	88.44
3342	Communications Equipment Manufacturing	2	0.59	89.03
8111	Automotive Repair and Maintenance	73	0.55	89.58
2383	Building Finishing Contractors	72	0.50	90.08
6211	Offices of Physicians	109	0.50	90.58
2379	Other Heavy and Civil Engineering Construction	9	0.49	91.07
3323	Architectural and Structural Metals Manufacturing	6	0.46	91.53
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	0.43	91.96
6116	Other Schools and Instruction	22	0.43	92.39
3344	Semiconductor and Other Electronic Component Manufacturing	5	0.42	92.80
3259	Other Chemical Product and Preparation Manufacturing	4	0.39	93.20
4242	Drugs and Druggists' Sundries Merchant Wholesalers	8	0.32	93.52
5151	Radio and Television Broadcasting	3	0.31	93.83
5419	Other Professional, Scientific, and Technical Services	270	0.29	94.12
4239	Miscellaneous Durable Goods Merchant Wholesalers	31	0.27	94.38
2372	Land Subdivision	4	0.25	94.63
3339	Other General Purpose Machinery Manufacturing	0	0.25	94.89
5411	Legal Services	207	0.23	95.12
2211	Electric Power Generation, Transmission and Distribution	6	0.23	95.35
5321	Automotive Equipment Rental and Leasing	1	0.21	95.56
4841	General Freight Trucking	75	0.21	95.77
6213	Offices of Other Health Practitioners	67	0.21	95.98
6231	Nursing Care Facilities (Skilled Nursing Facilities)	11	0.19	96.17
6244	Child Day Care Services	110	0.18	96.35
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	1	0.17	96.52
4413	Automotive Parts, Accessories, and Tire Stores	3	0.16	96.68
4247	Petroleum and Petroleum Products Merchant Wholesalers	7	0.15	96.83
4471	Gasoline Stations	7	0.15	96.99
7223	Special Food Services	33	0.15	97.13
8133	Social Advocacy Organizations	5	0.15	97.28
6215	Medical and Diagnostic Laboratories	4	0.14	97.42
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	21	0.14	97.55
5221	Depository Credit Intermediation	7	0.12	97.67
3231	Printing and Related Support Activities	57	0.12	97.79
4521	Department Stores	4	0.12	97.91
3331	Agriculture, Construction, and Mining Machinery Manufacturing	1	0.12	98.03
4233	Lumber and Other Construction Materials Merchant Wholesalers	9	0.11	98.14

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
4884	Support Activities for Road Transportation	9	0.11	98.25
4543	Direct Selling Establishments	28	0.10	98.35
4246	Chemical and Allied Products Merchant Wholesalers	17	0.09	98.44
8123	Drycleaning and Laundry Services	1	0.09	98.53
3353	Electrical Equipment Manufacturing	1	0.09	98.62
4881	Support Activities for Air Transportation	1	0.07	98.69
8134	Civic and Social Organizations	4	0.07	98.76
4431	Electronics and Appliance Stores	68	0.07	98.83
8132	Grantmaking and Giving Services	0	0.07	98.90
4411	Automobile Dealers	6	0.06	98.96
6221	General Medical and Surgical Hospitals	3	0.06	99.02
5311	Lessors of Real Estate	12	0.06	99.08
4232	Furniture and Home Furnishing Merchant Wholesalers	9	0.06	99.14
5152	Cable and Other Subscription Programming	3	0.05	99.19
4842	Specialized Freight Trucking	4	0.05	99.24
1114	Greenhouse, Nursery, and Floriculture Production	2	0.05	99.29
8122	Death Care Services	0	0.05	99.34
3364	Aerospace Product and Parts Manufacturing	2	0.04	99.39
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	14	0.04	99.43
3391	Medical Equipment and Supplies Manufacturing	5	0.04	99.47
6239	Other Residential Care Facilities	0	0.04	99.51
7121	Museums, Historical Sites, and Similar Institutions	2	0.04	99.55
8112	Electronic and Precision Equipment Repair and Maintenance	10	0.04	99.58
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	1	0.04	99.62
5414	Specialized Design Services	116	0.03	99.66
7139	Other Amusement and Recreation Industries	58	0.03	99.69
4241	Paper and Paper Product Merchant Wholesalers	20	0.03	99.72
6114	Business Schools and Computer and Management Training	7	0.03	99.75
3333	Commercial and Service Industry Machinery Manufacturing	6	0.03	99.78
3222	Converted Paper Product Manufacturing	1	0.03	99.81
7225	Restaurants and Other Eating Places	176	0.03	99.84
2213	Water, Sewage and Other Systems	5	0.03	99.87
5313	Activities Related to Real Estate	13	0.03	99.89
4541	Electronic Shopping and Mail-Order Houses	0	0.03	99.92
3262	Rubber Product Manufacturing	0	0.03	99.95
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.03	99.97
5222	Nondepository Credit Intermediation	5	0.03	100.00

Source and Notes: See Table 3.3.

Table 3.7A. Nonprofessional Services—Number of Listed VOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
5241	Insurance Carriers	1	12.42	12.42
2362	Nonresidential Building Construction	14	8.19	20.61
5614	Business Support Services	8	5.78	26.39
2382	Building Equipment Contractors	8	5.01	31.40
5617	Services to Buildings and Dwellings	1	4.17	35.56
5415	Computer Systems Design and Related Services	10	4.10	39.67
5413	Architectural, Engineering, and Related Services	17	3.71	43.38
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	3.68	47.06
5418	Advertising, Public Relations, and Related Services	0	3.36	50.42
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	2.92	53.34
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2	1.99	55.33
5416	Management, Scientific, and Technical Consulting Services	23	1.97	57.30
8129	Other Personal Services	0	1.89	59.20
6242	Community Food and Housing, and Emergency and Other Relief Services	0	1.78	60.98
5112	Software Publishers	2	1.76	62.74
5613	Employment Services	4	1.61	64.35
6241	Individual and Family Services	1	1.60	65.95
5616	Investigation and Security Services	2	1.55	67.50
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	1.48	68.99
5179	Other Telecommunications	2	1.47	70.45
3351	Electric Lighting Equipment Manufacturing	0	1.44	71.89
5223	Activities Related to Credit Intermediation	0	1.43	73.32
5621	Waste Collection	0	1.31	74.63
5622	Waste Treatment and Disposal	0	1.30	75.93
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	2	1.14	77.07
2373	Highway, Street, and Bridge Construction	0	1.07	78.14
3341	Computer and Peripheral Equipment Manufacturing	0	1.04	79.18
8139	Business, Professional, Labor, Political, and Similar Organizations	0	1.04	80.22
2381	Foundation, Structure, and Building Exterior Contractors	4	1.00	81.21
8131	Religious Organizations	0	0.96	82.17
2371	Utility System Construction	0	0.91	83.08
2389	Other Specialty Trade Contractors	5	0.90	83.99
6243	Vocational Rehabilitation Services	3	0.89	84.88
5629	Remediation and Other Waste Management Services	0	0.75	85.63
5172	Wireless Telecommunications Carriers (except Satellite)	0	0.71	86.35

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0	0.71	87.06
2361	Residential Building Construction	4	0.71	87.77
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	0.67	88.44
3342	Communications Equipment Manufacturing	0	0.59	89.03
8111	Automotive Repair and Maintenance	0	0.55	89.58
2383	Building Finishing Contractors	2	0.50	90.08
6211	Offices of Physicians	2	0.50	90.58
2379	Other Heavy and Civil Engineering Construction	0	0.49	91.07
3323	Architectural and Structural Metals Manufacturing	0	0.46	91.53
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	0.43	91.96
6116	Other Schools and Instruction	0	0.43	92.39
3344	Semiconductor and Other Electronic Component Manufacturing	0	0.42	92.80
3259	Other Chemical Product and Preparation Manufacturing	0	0.39	93.20
4242	Drugs and Druggists' Sundries Merchant Wholesalers	2	0.32	93.52
5151	Radio and Television Broadcasting	0	0.31	93.83
5419	Other Professional, Scientific, and Technical Services	9	0.29	94.12
4239	Miscellaneous Durable Goods Merchant Wholesalers	3	0.27	94.38
2372	Land Subdivision	0	0.25	94.63
3339	Other General Purpose Machinery Manufacturing	0	0.25	94.89
5411	Legal Services	0	0.23	95.12
2211	Electric Power Generation, Transmission and Distribution	1	0.23	95.35
5321	Automotive Equipment Rental and Leasing	0	0.21	95.56
4841	General Freight Trucking	0	0.21	95.77
6213	Offices of Other Health Practitioners	0	0.21	95.98
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0	0.19	96.17
6244	Child Day Care Services	0	0.18	96.35
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0	0.17	96.52
4413	Automotive Parts, Accessories, and Tire Stores	0	0.16	96.68
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	0.15	96.83
4471	Gasoline Stations	0	0.15	96.99
7223	Special Food Services	0	0.15	97.13
8133	Social Advocacy Organizations	0	0.15	97.28
6215	Medical and Diagnostic Laboratories	0	0.14	97.42
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	1	0.14	97.55
5221	Depository Credit Intermediation	0	0.12	97.67
3231	Printing and Related Support Activities	0	0.12	97.79
4521	Department Stores	0	0.12	97.91
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.12	98.03
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.11	98.14

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
4884	Support Activities for Road Transportation	1	0.11	98.25
4543	Direct Selling Establishments	0	0.10	98.35
4246	Chemical and Allied Products Merchant Wholesalers	0	0.09	98.44
8123	Drycleaning and Laundry Services	0	0.09	98.53
3353	Electrical Equipment Manufacturing	0	0.09	98.62
4881	Support Activities for Air Transportation	0	0.07	98.69
8134	Civic and Social Organizations	2	0.07	98.76
4431	Electronics and Appliance Stores	0	0.07	98.83
8132	Grantmaking and Giving Services	0	0.07	98.90
4411	Automobile Dealers	1	0.06	98.96
6221	General Medical and Surgical Hospitals	0	0.06	99.02
5311	Lessors of Real Estate	0	0.06	99.08
4232	Furniture and Home Furnishing Merchant Wholesalers	0	0.06	99.14
5152	Cable and Other Subscription Programming	0	0.05	99.19
4842	Specialized Freight Trucking	0	0.05	99.24
1114	Greenhouse, Nursery, and Floriculture Production	0	0.05	99.29
8122	Death Care Services	0	0.05	99.34
3364	Aerospace Product and Parts Manufacturing	0	0.04	99.39
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.04	99.43
3391	Medical Equipment and Supplies Manufacturing	0	0.04	99.47
6239	Other Residential Care Facilities	0	0.04	99.51
7121	Museums, Historical Sites, and Similar Institutions	0	0.04	99.55
8112	Electronic and Precision Equipment Repair and Maintenance	1	0.04	99.58
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0	0.04	99.62
5414	Specialized Design Services	0	0.03	99.66
7139	Other Amusement and Recreation Industries	0	0.03	99.69
4241	Paper and Paper Product Merchant Wholesalers	0	0.03	99.72
6114	Business Schools and Computer and Management Training	0	0.03	99.75
3333	Commercial and Service Industry Machinery Manufacturing	0	0.03	99.78
3222	Converted Paper Product Manufacturing	0	0.03	99.81
7225	Restaurants and Other Eating Places	0	0.03	99.84
2213	Water, Sewage and Other Systems	0	0.03	99.87
5313	Activities Related to Real Estate	0	0.03	99.89
4541	Electronic Shopping and Mail-Order Houses	0	0.03	99.92
3262	Rubber Product Manufacturing	0	0.03	99.95
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.03	99.97
5222	Nondepository Credit Intermediation	0	0.03	100.00

Source and Notes: See Table 3.3.

Table 3.7B. Nonprofessional Services—Number of Listed SDVOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
5241	Insurance Carriers	1	12.42	12.42
2362	Nonresidential Building Construction	8	8.19	20.61
5614	Business Support Services	3	5.78	26.39
2382	Building Equipment Contractors	3	5.01	31.40
5617	Services to Buildings and Dwellings	1	4.17	35.56
5415	Computer Systems Design and Related Services	4	4.10	39.67
5413	Architectural, Engineering, and Related Services	10	3.71	43.38
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	3.68	47.06
5418	Advertising, Public Relations, and Related Services	0	3.36	50.42
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	2.92	53.34
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	1	1.99	55.33
5416	Management, Scientific, and Technical Consulting Services	18	1.97	57.30
8129	Other Personal Services	0	1.89	59.20
6242	Community Food and Housing, and Emergency and Other Relief Services	0	1.78	60.98
5112	Software Publishers	0	1.76	62.74
5613	Employment Services	3	1.61	64.35
6241	Individual and Family Services	0	1.60	65.95
5616	Investigation and Security Services	0	1.55	67.50
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	0	1.48	68.99
5179	Other Telecommunications	2	1.47	70.45
3351	Electric Lighting Equipment Manufacturing	0	1.44	71.89
5223	Activities Related to Credit Intermediation	0	1.43	73.32
5621	Waste Collection	0	1.31	74.63
5622	Waste Treatment and Disposal	0	1.30	75.93
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	1.14	77.07
2373	Highway, Street, and Bridge Construction	0	1.07	78.14
3341	Computer and Peripheral Equipment Manufacturing	0	1.04	79.18
8139	Business, Professional, Labor, Political, and Similar Organizations	0	1.04	80.22
2381	Foundation, Structure, and Building Exterior Contractors	1	1.00	81.21
8131	Religious Organizations	0	0.96	82.17
2371	Utility System Construction	0	0.91	83.08
2389	Other Specialty Trade Contractors	0	0.90	83.99
6243	Vocational Rehabilitation Services	2	0.89	84.88
5629	Remediation and Other Waste Management Services	0	0.75	85.63
5172	Wireless Telecommunications Carriers (except Satellite)	0	0.71	86.35

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0	0.71	87.06
2361	Residential Building Construction	2	0.71	87.77
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	0.67	88.44
3342	Communications Equipment Manufacturing	0	0.59	89.03
8111	Automotive Repair and Maintenance	0	0.55	89.58
2383	Building Finishing Contractors	0	0.50	90.08
6211	Offices of Physicians	1	0.50	90.58
2379	Other Heavy and Civil Engineering Construction	0	0.49	91.07
3323	Architectural and Structural Metals Manufacturing	0	0.46	91.53
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	0.43	91.96
6116	Other Schools and Instruction	0	0.43	92.39
3344	Semiconductor and Other Electronic Component Manufacturing	0	0.42	92.80
3259	Other Chemical Product and Preparation Manufacturing	0	0.39	93.20
4242	Drugs and Druggists' Sundries Merchant Wholesalers	1	0.32	93.52
5151	Radio and Television Broadcasting	0	0.31	93.83
5419	Other Professional, Scientific, and Technical Services	4	0.29	94.12
4239	Miscellaneous Durable Goods Merchant Wholesalers	1	0.27	94.38
2372	Land Subdivision	0	0.25	94.63
3339	Other General Purpose Machinery Manufacturing	0	0.25	94.89
5411	Legal Services	0	0.23	95.12
2211	Electric Power Generation, Transmission and Distribution	0	0.23	95.35
5321	Automotive Equipment Rental and Leasing	0	0.21	95.56
4841	General Freight Trucking	0	0.21	95.77
6213	Offices of Other Health Practitioners	0	0.21	95.98
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0	0.19	96.17
6244	Child Day Care Services	0	0.18	96.35
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0	0.17	96.52
4413	Automotive Parts, Accessories, and Tire Stores	0	0.16	96.68
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	0.15	96.83
4471	Gasoline Stations	0	0.15	96.99
7223	Special Food Services	0	0.15	97.13
8133	Social Advocacy Organizations	0	0.15	97.28
6215	Medical and Diagnostic Laboratories	0	0.14	97.42
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	0.14	97.55
5221	Depository Credit Intermediation	0	0.12	97.67
3231	Printing and Related Support Activities	0	0.12	97.79
4521	Department Stores	0	0.12	97.91
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.12	98.03
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.11	98.14

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
4884	Support Activities for Road Transportation	1	0.11	98.25
4543	Direct Selling Establishments	0	0.10	98.35
4246	Chemical and Allied Products Merchant Wholesalers	0	0.09	98.44
8123	Drycleaning and Laundry Services	0	0.09	98.53
3353	Electrical Equipment Manufacturing	0	0.09	98.62
4881	Support Activities for Air Transportation	0	0.07	98.69
8134	Civic and Social Organizations	1	0.07	98.76
4431	Electronics and Appliance Stores	0	0.07	98.83
8132	Grantmaking and Giving Services	0	0.07	98.90
4411	Automobile Dealers	0	0.06	98.96
6221	General Medical and Surgical Hospitals	0	0.06	99.02
5311	Lessors of Real Estate	0	0.06	99.08
4232	Furniture and Home Furnishing Merchant Wholesalers	0	0.06	99.14
5152	Cable and Other Subscription Programming	0	0.05	99.19
4842	Specialized Freight Trucking	0	0.05	99.24
1114	Greenhouse, Nursery, and Floriculture Production	0	0.05	99.29
8122	Death Care Services	0	0.05	99.34
3364	Aerospace Product and Parts Manufacturing	0	0.04	99.39
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.04	99.43
3391	Medical Equipment and Supplies Manufacturing	0	0.04	99.47
6239	Other Residential Care Facilities	0	0.04	99.51
7121	Museums, Historical Sites, and Similar Institutions	0	0.04	99.55
8112	Electronic and Precision Equipment Repair and Maintenance	0	0.04	99.58
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0	0.04	99.62
5414	Specialized Design Services	0	0.03	99.66
7139	Other Amusement and Recreation Industries	0	0.03	99.69
4241	Paper and Paper Product Merchant Wholesalers	0	0.03	99.72
6114	Business Schools and Computer and Management Training	0	0.03	99.75
3333	Commercial and Service Industry Machinery Manufacturing	0	0.03	99.78
3222	Converted Paper Product Manufacturing	0	0.03	99.81
7225	Restaurants and Other Eating Places	0	0.03	99.84
2213	Water, Sewage and Other Systems	0	0.03	99.87
5313	Activities Related to Real Estate	0	0.03	99.89
4541	Electronic Shopping and Mail-Order Houses	0	0.03	99.92
3262	Rubber Product Manufacturing	0	0.03	99.95
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0	0.03	99.97
5222	Nondepository Credit Intermediation	0	0.03	100.00

Source and Notes: See Table 3.3.

Table 3.8. Commodities—Number of Listed M/WBE Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	42	9.89	9.89
4247	Petroleum and Petroleum Products Merchant Wholesalers	7	8.50	18.40
2371	Utility System Construction	26	6.13	24.53
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	57	5.72	30.25
4411	Automobile Dealers	6	5.14	35.39
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	11	4.52	39.92
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	67	3.46	43.37
2362	Nonresidential Building Construction	87	3.32	46.69
3342	Communications Equipment Manufacturing	7	3.17	49.86
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	3.05	52.91
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	16	3.02	55.93
2382	Building Equipment Contractors	176	2.89	58.82
5416	Management, Scientific, and Technical Consulting Services	581	2.64	61.46
5415	Computer Systems Design and Related Services	268	2.52	63.98
3341	Computer and Peripheral Equipment Manufacturing	15	2.21	66.19
3353	Electrical Equipment Manufacturing	1	2.20	68.39
2373	Highway, Street, and Bridge Construction	37	2.06	70.45
3241	Petroleum and Coal Products Manufacturing	0	1.80	72.25
3261	Plastics Product Manufacturing	5	1.74	73.98
3211	Sawmills and Wood Preservation	0	1.65	75.63
4232	Furniture and Home Furnishing Merchant Wholesalers	25	1.61	77.24
3274	Lime and Gypsum Product Manufacturing	0	1.44	78.69
5413	Architectural, Engineering, and Related Services	186	1.36	80.05
3362	Motor Vehicle Body and Trailer Manufacturing	0	1.24	81.29
4246	Chemical and Allied Products Merchant Wholesalers	17	1.22	82.52
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	12	1.06	83.57
5112	Software Publishers	31	0.89	84.47
4241	Paper and Paper Product Merchant Wholesalers	24	0.82	85.29
4532	Office Supplies, Stationery, and Gift Stores	13	0.78	86.07
4233	Lumber and Other Construction Materials Merchant Wholesalers	22	0.74	86.81
5179	Other Telecommunications	9	0.70	87.51
4543	Direct Selling Establishments	28	0.60	88.11
3251	Basic Chemical Manufacturing	1	0.58	88.69
4413	Automotive Parts, Accessories, and Tire Stores	17	0.56	89.24
5614	Business Support Services	0	0.53	89.78
3259	Other Chemical Product and Preparation Manufacturing	4	0.45	90.22

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
3364	Aerospace Product and Parts Manufacturing	2	0.42	90.64
3339	Other General Purpose Machinery Manufacturing	3	0.42	91.06
4481	Clothing Stores	67	0.40	91.46
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	26	0.38	91.84
5239	Other Financial Investment Activities	34	0.37	92.21
8111	Automotive Repair and Maintenance	43	0.35	92.56
4239	Miscellaneous Durable Goods Merchant Wholesalers	31	0.29	92.85
3359	Other Electrical Equipment and Component Manufacturing	5	0.29	93.14
2389	Other Specialty Trade Contractors	70	0.27	93.41
4541	Electronic Shopping and Mail-Order Houses	19	0.27	93.68
3273	Cement and Concrete Product Manufacturing	3	0.27	93.95
4441	Building Material and Supplies Dealers	13	0.26	94.21
3391	Medical Equipment and Supplies Manufacturing	8	0.25	94.46
2361	Residential Building Construction	100	0.25	94.71
6241	Individual and Family Services	9	0.23	94.93
3331	Agriculture, Construction, and Mining Machinery Manufacturing	2	0.22	95.15
4841	General Freight Trucking	75	0.21	95.36
5622	Waste Treatment and Disposal	3	0.21	95.56
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	14	0.19	95.75
3254	Pharmaceutical and Medicine Manufacturing	2	0.19	95.94
4442	Lawn and Garden Equipment and Supplies Stores	0	0.16	96.10
4539	Other Miscellaneous Store Retailers	97	0.16	96.26
3262	Rubber Product Manufacturing	0	0.16	96.42
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0	0.15	96.56
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0	0.14	96.71
2381	Foundation, Structure, and Building Exterior Contractors	63	0.14	96.84
3255	Paint, Coating, and Adhesive Manufacturing	2	0.14	96.98
4431	Electronics and Appliance Stores	68	0.12	97.10
3329	Other Fabricated Metal Product Manufacturing	1	0.11	97.21
8114	Personal and Household Goods Repair and Maintenance	52	0.11	97.32
5619	Other Support Services	209	0.11	97.44
3399	Other Miscellaneous Manufacturing	3	0.10	97.54
2211	Electric Power Generation, Transmission and Distribution	6	0.10	97.64
5629	Remediation and Other Waste Management Services	8	0.09	97.73
3372	Office Furniture (including Fixtures) Manufacturing	2	0.09	97.82
3333	Commercial and Service Industry Machinery Manufacturing	6	0.09	97.91
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	11	0.09	97.99
3335	Metalworking Machinery Manufacturing	0	0.08	98.08
4482	Shoe Stores	10	0.08	98.15

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed M/WBEs	Industry Weight	Cumulative Industry Weight
3312	Steel Product Manufacturing from Purchased Steel	0	0.08	98.23
3351	Electric Lighting Equipment Manufacturing	4	0.07	98.30
5221	Depository Credit Intermediation	6	0.07	98.37
3159	Apparel Accessories and Other Apparel Manufacturing	4	0.07	98.44
2123	Nonmetallic Mineral Mining and Quarrying	0	0.07	98.51
3361	Motor Vehicle Manufacturing	0	0.06	98.57
5419	Other Professional, Scientific, and Technical Services	215	0.06	98.63
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	42	0.06	98.69
5242	Agencies, Brokerages, and Other Insurance Related Activities	106	0.06	98.75
3344	Semiconductor and Other Electronic Component Manufacturing	1	0.05	98.80
8112	Electronic and Precision Equipment Repair and Maintenance	10	0.05	98.85
5411	Legal Services	5	0.05	98.90
3321	Forging and Stamping	0	0.05	98.94
5617	Services to Buildings and Dwellings	50	0.04	98.99
4242	Drugs and Druggists' Sundries Merchant Wholesalers	8	0.04	99.03
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	1	0.04	99.07
3366	Ship and Boat Building	0	0.04	99.11
4512	Book Stores and News Dealers	6	0.04	99.15
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0	0.03	99.18
5311	Lessors of Real Estate	32	0.03	99.22
3323	Architectural and Structural Metals Manufacturing	0	0.03	99.25
4881	Support Activities for Air Transportation	1	0.03	99.28
4412	Other Motor Vehicle Dealers	6	0.03	99.31
5414	Specialized Design Services	98	0.03	99.34
2383	Building Finishing Contractors	19	0.03	99.37
2131	Support Activities for Mining	4	0.03	99.40
2212	Natural Gas Distribution	0	0.03	99.42

Source and Notes: See Table 3.4.

Table 3.8A. Commodities—Number of Listed VOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	2	9.89	9.89
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	8.50	18.40
2371	Utility System Construction	0	6.13	24.53
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	5.72	30.25
4411	Automobile Dealers	1	5.14	35.39
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0	4.52	39.92
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	4	3.46	43.37
2362	Nonresidential Building Construction	14	3.32	46.69
3342	Communications Equipment Manufacturing	0	3.17	49.86
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	3.05	52.91
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	1	3.02	55.93
2382	Building Equipment Contractors	8	2.89	58.82
5416	Management, Scientific, and Technical Consulting Services	22	2.64	61.46
5415	Computer Systems Design and Related Services	10	2.52	63.98
3341	Computer and Peripheral Equipment Manufacturing	0	2.21	66.19
3353	Electrical Equipment Manufacturing	0	2.20	68.39
2373	Highway, Street, and Bridge Construction	0	2.06	70.45
3241	Petroleum and Coal Products Manufacturing	0	1.80	72.25
3261	Plastics Product Manufacturing	0	1.74	73.98
3211	Sawmills and Wood Preservation	0	1.65	75.63
4232	Furniture and Home Furnishing Merchant Wholesalers	0	1.61	77.24
3274	Lime and Gypsum Product Manufacturing	0	1.44	78.69
5413	Architectural, Engineering, and Related Services	8	1.36	80.05
3362	Motor Vehicle Body and Trailer Manufacturing	0	1.24	81.29
4246	Chemical and Allied Products Merchant Wholesalers	0	1.22	82.52
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	0	1.06	83.57
5112	Software Publishers	2	0.89	84.47
4241	Paper and Paper Product Merchant Wholesalers	0	0.82	85.29
4532	Office Supplies, Stationery, and Gift Stores	0	0.78	86.07
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.74	86.81
5179	Other Telecommunications	0	0.70	87.51
4543	Direct Selling Establishments	0	0.60	88.11
3251	Basic Chemical Manufacturing	0	0.58	88.69
4413	Automotive Parts, Accessories, and Tire Stores	0	0.56	89.24
5614	Business Support Services	0	0.53	89.78
3259	Other Chemical Product and Preparation Manufacturing	0	0.45	90.22

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
3364	Aerospace Product and Parts Manufacturing	0	0.42	90.64
3339	Other General Purpose Machinery Manufacturing	0	0.42	91.06
4481	Clothing Stores	0	0.40	91.46
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	1	0.38	91.84
5239	Other Financial Investment Activities	0	0.37	92.21
8111	Automotive Repair and Maintenance	0	0.35	92.56
4239	Miscellaneous Durable Goods Merchant Wholesalers	2	0.29	92.85
3359	Other Electrical Equipment and Component Manufacturing	0	0.29	93.14
2389	Other Specialty Trade Contractors	5	0.27	93.41
4541	Electronic Shopping and Mail-Order Houses	0	0.27	93.68
3273	Cement and Concrete Product Manufacturing	0	0.27	93.95
4441	Building Material and Supplies Dealers	0	0.26	94.21
3391	Medical Equipment and Supplies Manufacturing	0	0.25	94.46
2361	Residential Building Construction	2	0.25	94.71
6241	Individual and Family Services	1	0.23	94.93
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.22	95.15
4841	General Freight Trucking	0	0.21	95.36
5622	Waste Treatment and Disposal	0	0.21	95.56
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.19	95.75
3254	Pharmaceutical and Medicine Manufacturing	0	0.19	95.94
4442	Lawn and Garden Equipment and Supplies Stores	0	0.16	96.10
4539	Other Miscellaneous Store Retailers	2	0.16	96.26
3262	Rubber Product Manufacturing	0	0.16	96.42
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0	0.15	96.56
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0	0.14	96.71
2381	Foundation, Structure, and Building Exterior Contractors	4	0.14	96.84
3255	Paint, Coating, and Adhesive Manufacturing	0	0.14	96.98
4431	Electronics and Appliance Stores	0	0.12	97.10
3329	Other Fabricated Metal Product Manufacturing	0	0.11	97.21
8114	Personal and Household Goods Repair and Maintenance	0	0.11	97.32
5619	Other Support Services	6	0.11	97.44
3399	Other Miscellaneous Manufacturing	0	0.10	97.54
2211	Electric Power Generation, Transmission and Distribution	1	0.10	97.64
5629	Remediation and Other Waste Management Services	0	0.09	97.73
3372	Office Furniture (including Fixtures) Manufacturing	0	0.09	97.82
3333	Commercial and Service Industry Machinery Manufacturing	0	0.09	97.91
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0	0.09	97.99
3335	Metalworking Machinery Manufacturing	0	0.08	98.08
4482	Shoe Stores	1	0.08	98.15

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed VOBs	Industry Weight	Cumulative Industry Weight
3312	Steel Product Manufacturing from Purchased Steel	0	0.08	98.23
3351	Electric Lighting Equipment Manufacturing	0	0.07	98.30
5221	Depository Credit Intermediation	0	0.07	98.37
3159	Apparel Accessories and Other Apparel Manufacturing	0	0.07	98.44
2123	Nonmetallic Mineral Mining and Quarrying	0	0.07	98.51
3361	Motor Vehicle Manufacturing	0	0.06	98.57
5419	Other Professional, Scientific, and Technical Services	8	0.06	98.63
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0	0.06	98.69
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	0.06	98.75
3344	Semiconductor and Other Electronic Component Manufacturing	0	0.05	98.80
8112	Electronic and Precision Equipment Repair and Maintenance	1	0.05	98.85
5411	Legal Services	0	0.05	98.90
3321	Forging and Stamping	0	0.05	98.94
5617	Services to Buildings and Dwellings	0	0.04	98.99
4242	Drugs and Druggists' Sundries Merchant Wholesalers	2	0.04	99.03
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0	0.04	99.07
3366	Ship and Boat Building	0	0.04	99.11
4512	Book Stores and News Dealers	0	0.04	99.15
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0	0.03	99.18
5311	Lessors of Real Estate	0	0.03	99.22
3323	Architectural and Structural Metals Manufacturing	0	0.03	99.25
4881	Support Activities for Air Transportation	0	0.03	99.28
4412	Other Motor Vehicle Dealers	1	0.03	99.31
5414	Specialized Design Services	0	0.03	99.34
2383	Building Finishing Contractors	1	0.03	99.37
2131	Support Activities for Mining	0	0.03	99.40
2212	Natural Gas Distribution	0	0.03	99.42

Source and Notes: See Table 3.4.

Table 3.8B. Commodities—Number of Listed SDVOB Establishments and Industry Weight (Dollars Awarded), by NAICS Code

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	1	9.89	9.89
4247	Petroleum and Petroleum Products Merchant Wholesalers	0	8.50	18.40
2371	Utility System Construction	0	6.13	24.53
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0	5.72	30.25
4411	Automobile Dealers	0	5.14	35.39
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0	4.52	39.92
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2	3.46	43.37
2362	Nonresidential Building Construction	8	3.32	46.69
3342	Communications Equipment Manufacturing	0	3.17	49.86
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0	3.05	52.91
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0	3.02	55.93
2382	Building Equipment Contractors	3	2.89	58.82
5416	Management, Scientific, and Technical Consulting Services	16	2.64	61.46
5415	Computer Systems Design and Related Services	4	2.52	63.98
3341	Computer and Peripheral Equipment Manufacturing	0	2.21	66.19
3353	Electrical Equipment Manufacturing	0	2.20	68.39
2373	Highway, Street, and Bridge Construction	0	2.06	70.45
3241	Petroleum and Coal Products Manufacturing	0	1.80	72.25
3261	Plastics Product Manufacturing	0	1.74	73.98
3211	Sawmills and Wood Preservation	0	1.65	75.63
4232	Furniture and Home Furnishing Merchant Wholesalers	0	1.61	77.24
3274	Lime and Gypsum Product Manufacturing	0	1.44	78.69
5413	Architectural, Engineering, and Related Services	4	1.36	80.05
3362	Motor Vehicle Body and Trailer Manufacturing	0	1.24	81.29
4246	Chemical and Allied Products Merchant Wholesalers	0	1.22	82.52
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	0	1.06	83.57
5112	Software Publishers	0	0.89	84.47
4241	Paper and Paper Product Merchant Wholesalers	0	0.82	85.29
4532	Office Supplies, Stationery, and Gift Stores	0	0.78	86.07
4233	Lumber and Other Construction Materials Merchant Wholesalers	0	0.74	86.81
5179	Other Telecommunications	0	0.70	87.51
4543	Direct Selling Establishments	0	0.60	88.11
3251	Basic Chemical Manufacturing	0	0.58	88.69
4413	Automotive Parts, Accessories, and Tire Stores	0	0.56	89.24
5614	Business Support Services	0	0.53	89.78
3259	Other Chemical Product and Preparation Manufacturing	0	0.45	90.22

M/WBE Availability in the City of Austin's Market Area

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
3364	Aerospace Product and Parts Manufacturing	0	0.42	90.64
3339	Other General Purpose Machinery Manufacturing	0	0.42	91.06
4481	Clothing Stores	0	0.40	91.46
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0	0.38	91.84
5239	Other Financial Investment Activities	0	0.37	92.21
8111	Automotive Repair and Maintenance	0	0.35	92.56
4239	Miscellaneous Durable Goods Merchant Wholesalers	1	0.29	92.85
3359	Other Electrical Equipment and Component Manufacturing	0	0.29	93.14
2389	Other Specialty Trade Contractors	0	0.27	93.41
4541	Electronic Shopping and Mail-Order Houses	0	0.27	93.68
3273	Cement and Concrete Product Manufacturing	0	0.27	93.95
4441	Building Material and Supplies Dealers	0	0.26	94.21
3391	Medical Equipment and Supplies Manufacturing	0	0.25	94.46
2361	Residential Building Construction	1	0.25	94.71
6241	Individual and Family Services	0	0.23	94.93
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0	0.22	95.15
4841	General Freight Trucking	0	0.21	95.36
5622	Waste Treatment and Disposal	0	0.21	95.56
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0	0.19	95.75
3254	Pharmaceutical and Medicine Manufacturing	0	0.19	95.94
4442	Lawn and Garden Equipment and Supplies Stores	0	0.16	96.10
4539	Other Miscellaneous Store Retailers	2	0.16	96.26
3262	Rubber Product Manufacturing	0	0.16	96.42
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0	0.15	96.56
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0	0.14	96.71
2381	Foundation, Structure, and Building Exterior Contractors	1	0.14	96.84
3255	Paint, Coating, and Adhesive Manufacturing	0	0.14	96.98
4431	Electronics and Appliance Stores	0	0.12	97.10
3329	Other Fabricated Metal Product Manufacturing	0	0.11	97.21
8114	Personal and Household Goods Repair and Maintenance	0	0.11	97.32
5619	Other Support Services	3	0.11	97.44
3399	Other Miscellaneous Manufacturing	0	0.10	97.54
2211	Electric Power Generation, Transmission and Distribution	0	0.10	97.64
5629	Remediation and Other Waste Management Services	0	0.09	97.73
3372	Office Furniture (including Fixtures) Manufacturing	0	0.09	97.82
3333	Commercial and Service Industry Machinery Manufacturing	0	0.09	97.91
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	0	0.09	97.99
3335	Metalworking Machinery Manufacturing	0	0.08	98.08
4482	Shoe Stores	0	0.08	98.15

NAICS Industry Group	NAICS Description	Number of Listed SDVOBs	Industry Weight	Cumulative Industry Weight
3312	Steel Product Manufacturing from Purchased Steel	0	0.08	98.23
3351	Electric Lighting Equipment Manufacturing	0	0.07	98.30
5221	Depository Credit Intermediation	0	0.07	98.37
3159	Apparel Accessories and Other Apparel Manufacturing	0	0.07	98.44
2123	Nonmetallic Mineral Mining and Quarrying	0	0.07	98.51
3361	Motor Vehicle Manufacturing	0	0.06	98.57
5419	Other Professional, Scientific, and Technical Services	4	0.06	98.63
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0	0.06	98.69
5242	Agencies, Brokerages, and Other Insurance Related Activities	0	0.06	98.75
3344	Semiconductor and Other Electronic Component Manufacturing	0	0.05	98.80
8112	Electronic and Precision Equipment Repair and Maintenance	0	0.05	98.85
5411	Legal Services	0	0.05	98.90
3321	Forging and Stamping	0	0.05	98.94
5617	Services to Buildings and Dwellings	0	0.04	98.99
4242	Drugs and Druggists' Sundries Merchant Wholesalers	1	0.04	99.03
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0	0.04	99.07
3366	Ship and Boat Building	0	0.04	99.11
4512	Book Stores and News Dealers	0	0.04	99.15
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0	0.03	99.18
5311	Lessors of Real Estate	0	0.03	99.22
3323	Architectural and Structural Metals Manufacturing	0	0.03	99.25
4881	Support Activities for Air Transportation	0	0.03	99.28
4412	Other Motor Vehicle Dealers	0	0.03	99.31
5414	Specialized Design Services	0	0.03	99.34
2383	Building Finishing Contractors	0	0.03	99.37
2131	Support Activities for Mining	0	0.03	99.40
2212	Natural Gas Distribution	0	0.03	99.42

Source and Notes: See Table 3.4.

3. Verify Listed M/WBEs, VOBs and SDVOBs

a. Introduction

It is likely that the race and gender classifications for businesses from Dun & Bradstreet and the race, gender and veteran classifications from M/WBE directories is not correct in all instances. Phenomena such as ownership changes, associate or mentor status, recording errors, or even misrepresentation, will lead to businesses being listed as M/WBEs, VOBs or SDVOBs in a particular directory even though they may not actually be owned by such entities. Other things equal, this type of error would cause our availability estimate to be biased upward from the actual availability number.

The second likelihood that must be addressed is that not all M/WBE, VOB and SDVOB businesses are necessarily listed—either in Dun & Bradstreet or in any of the other directories we collected. Such phenomena as geographic relocation, ownership changes, directory compilation errors, fear of stigmatization, and limitations in M/WBE, VOB and SDVOB outreach, could all lead to such establishments being unlisted. Other things equal, this type of error would cause our availability estimate to be biased downward from the actual availability number.

In our experience, we have found that both types of bias are not uncommon. For this Study, we corrected for the effect of these biases using statistical sampling procedures. We surveyed a large, stratified random sample of almost 25,000 establishments drawn from the Baseline Business Universe and measured how often and how they were misclassified (or unclassified) by race, gender and veteran status.⁵⁶

Strata were defined according to NAICS industries and listed M/WBE status.⁵⁷ In the telephone survey, up to 10 attempts were made to reach each business and speak with an appropriate respondent. Attempts were scheduled for a mix of day and evening, weekdays and weekends, and appointments were scheduled for callbacks when necessary. Of the 24,557 establishments in our sample, 7,862 (32.0%) were listed M/WBEs and 16,695 (68.0%) were unclassified by race or gender.⁵⁸ Of these 24,557 establishments, however, 3,575 (14.6%) were excluded as “unable to contact.”⁵⁹ Exclusions resulted primarily from disconnected phone numbers and establishments that were no longer in business.⁶⁰ Of the remaining 20,982 establishments, 6,757 (32.2%) were listed M/WBEs and the remaining 14,225 establishments (67.8%) were unclassified.⁶¹

The first part of the survey tested whether our sample of listed M/WBEs was correctly classified by race and/or gender. The second part of the survey tested whether the unclassified establishments (that is, those putatively owned by nonminority males) could all be properly classified as non-M/WBEs. Both elements of the survey are described in more detail below.⁶² The final part of the survey carried out a similar exercise for VOBs and SDVOBs.

⁵⁶ A similar method, with respect to M/WBE establishments, was employed by the Federal Reserve Board to deal with similar problems in designing and implementing the National Survey of Small Business Finances for 1993 and 1998. See Haggerty, C., K. Grigorian, R. Harter and J. D. Wolken (2000).

⁵⁷ A total of 372 separate industry strata were created based on NAICS code. All strata were then split according to listed M/WBE status to create a total of 744 strata. Generally, listed M/WBEs were sampled at a higher rate than unclassified establishments.

⁵⁸ Additionally, 100 were listed VOBs and 44 were listed SDVOBs.

⁵⁹ Only one putative VOB or SDVOB firm was excluded as being “unable to contact”.

⁶⁰ Other reasons included changed ownership, duplicate records, and refusals. Putative M/WBEs were not more likely to be affected by this than putative non-M/WBEs.

⁶¹ For veterans, of the remaining 20,982 establishments, 99 (0.47%) were listed VOBs, 44 (0.21%) were listed SDVOBs, and 20,883 (99.53%) were unclassified.

⁶² By “putative,” we mean the race and gender that we initially assigned to each firm based on the information provided by the City of Austin, Travis County, AISD, Dun & Bradstreet, our master M/WBE directory, or from other sources.

b. Survey of Listed M/WBEs

We selected a stratified random sample of 7,862 listed M/WBEs to verify the race and gender status of their owner(s). Of these, 1,105 (14.1%) were excluded as “unable to contact.” Of the remaining 6,757 establishments, we obtained complete interviews from 2,328, for a response rate of 34.5 percent.

Of the 2,328 establishments interviewed, 420 (18.04%) were actually owned by nonminority males. Misclassification varied by putative race and gender, as shown in Table 3.9. Misclassification was highest among putative Native American-owned establishments, followed by putative Asian/Pacific Islander-owned establishments, then Hispanic-owned establishments, then nonminority female-owned establishments and finally African American-owned establishments.⁶³ Misclassification was also observed in 64 percent of NAICS strata, ranging from a high of 100 percent to a low of 4.5 percent, with a median of 25.0 percent and a mean of 38.9 percent.

Table 3.9. Listed M/WBE Survey—Amount of Misclassification, by Putative M/WBE Type

Putative Race/Gender	Misclassification (Percentage Nonminority Male)	Misclassification (Percentage Other M/WBE Type)	Percentage Correctly Classified	Number of Businesses Interviewed
African American (either gender)	12.43	9.46	78.11	169
Hispanic (either gender)	16.42	14.11	69.47	475
Asian/Pacific Islander (either gender)	15.66	23.73	60.61	198
Native American (either gender)	48.00	20.00	32.00	25
Nonminority Female	19.03	11.02	69.95	1,461
All M/WBE Types	18.04	12.72	69.24	2,328

Source: NERA telephone surveys.

Notes: (1) Figures are rounded. Rounding was performed subsequent to any mathematical calculations.
(2) Similar calculations, not shown here, were performed within each stratum.

The race and gender status of the listed M/WBEs responding to the survey was changed, if necessary, according to the survey results. For example, if an establishment originally listed as

⁶³ For this study, “Black” or “African American” refers to an individual having origins in any of the Black racial groups of Africa; “Hispanic” refers to an individual of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; “Asian” or “Asian/Pacific Islander” refers to an individual having origins in the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; “Native American” refers to an individual having origins in any of the original peoples of North America or of Hawai’i.

African American-owned was actually nonminority male-owned, then that establishment was counted as nonminority male-owned for purposes of calculating M/WBE availability.

But what about the remaining putative African American-owned establishments that we did not interview? For these businesses, we estimated the race and gender of their ownership based on the amount of misclassification we observed among the putatively African American-owned establishments that we did interview. In this example, our interviews showed that 78.11 percent of these establishments are indeed actually African American-owned, 12.43 percent are actually nonminority male-owned, 8.28 percent are actually nonminority female-owned, 0.59 percent are actually Hispanic-owned, and 0.59 percent are actually Asian/Pacific Islander-owned. Therefore, we assigned each of the remaining putative African American-owned establishments a 78.11 percent probability of being African American-owned, a 12.43 percent probability of being nonminority male-owned, an 8.28 percent probability of being nonminority female-owned, a 0.59 percent probability of being Hispanic-owned, and a 0.59 percent probability of being Asian/Pacific Islander-owned. We performed this procedure within each sample stratum and for all putative race and gender categories.

4. Verify Putative Non-M/WBEs

a. Survey of Unclassified Businesses

In the same manner as our survey of listed M/WBEs, we also examined unclassified businesses, *i.e.*, any business that was not originally identified as an M/WBE, either in Dun & Bradstreet or in one or more of the other directories, and that would otherwise appear to be a non-M/WBE.

We selected a stratified random sample of 16,695 unclassified businesses from the Baseline Business Universe to verify the race and gender status of their owner(s). Of these, 2,470 (14.8%) were excluded as “unable to contact.” Of the 14,225 remaining establishments, we obtained 3,931 complete interviews, for a response rate of 27.6 percent.

Of the 3,931 establishments interviewed, as shown in Table 3.10, 2,853 (72.58%) were owned by nonminority males. Clearly, a large majority of unclassified businesses in the Baseline Business Universe are nonminority male-owned. Nevertheless, the survey results indicate that 27.42 percent of these establishments are *not* nonminority male-owned. Among the latter, the largest group was nonminority female-owned (14.70 percent), with descending size shares accounted for by Hispanic-owned (7.61 percent), Asian/Pacific Islander-owned (2.29 percent), African American-owned (2.24 percent), and Native American-owned (0.59 percent). Misclassification was also observed in 74 percent of NAICS strata, ranging from a high of 100 percent to a low of 2.3 percent, with a median of 30.0 percent and a mean of 36.8 percent.

Table 3.10. Unclassified Businesses Survey—By Race and Gender

Verified Race/Gender	Number of Businesses Interviewed	Percentage of Total
Nonminority male	2,853	72.58
Nonminority female	578	14.70
African American (either gender)	88	2.24
Hispanic (either gender)	299	7.61
Asian/Pacific Islander (either gender)	90	2.29
Native American (either gender)	23	0.59
TOTAL	3,931	100.00

Source and Notes: See Table 3.9. Numbers may not add to total due to rounding.

In the same manner as the survey of listed M/WBEs, the race and gender status of unclassified establishments was changed, if necessary, according to the survey results. For example, if an interviewed establishment that was originally unclassified indicated that it was actually nonminority male-owned, then that establishment was counted as nonminority male-owned for purposes of the M/WBE availability calculation. If the establishment indicated it was nonminority female-owned, it was counted as nonminority female, and so on. For unclassified establishments that were not interviewed, we assigned probability values (probability actually nonminority male-owned, probability actually nonminority female-owned, probability actually African American-owned, *etc.*) based on the interview responses. We again carried out the probability assignment procedure within each stratum.

5. Verify Putative VOBs and SDVOBs

We carried out a similar exercise for the putative VOBs and SDVOBs in our sample, as well as for the establishments that were unclassified according to VOB or SDVOB status. Of the 99 putative VOBs in our sample, we obtained complete interviews from 45, for a response rate of 45.5 percent. Of the 44 putative SDVOBs in our sample, we obtained complete interviews from 16, for a response rate of 36.4 percent. Of the 45 putative VOBs interviewed, 28 (62.22%) were actually owned by veterans. Of the 16 putative SDVOBs interviewed, 11 (68.75%) were actually owned by service-disabled veterans. The VOB and SDVOB status of the listed VOBs and SDVOBs responding to the survey was changed, if necessary, according to the survey results.

As with M/WBEs, for the remaining putative VOB and SDVOB businesses, we estimated the veteran status of their ownership based on the amount of misclassification we observed among the putatively VOB and SDVOB establishments that we did interview. In this example, our interviews showed that 62.22 percent and 68.75 percent of these establishments, respectively, are indeed actually veteran-owned or service-disabled veteran-owned, respectively, while 37.78 percent and 31.25 percent, respectively, are not. Therefore, we assigned each of the remaining putative veteran-owned establishments a 62.22 percent probability of being veteran-owned and a 37.78 percent chance of not being veteran-owned. We assigned each of the remaining putative

service-disabled veteran-owned establishments a 68.75 percent probability of being service-disabled veteran-owned and a 31.25 percent chance of being not service-disabled veteran-owned. We performed this procedure within each sample stratum and for all putative race and gender categories.

In the same manner as our survey of listed VOBs and SDVOBs, we also examined unclassified businesses, *i.e.*, any business that was not originally identified as a VOB or SDVOB in one or more of the directories we compiled, and that would otherwise appear to be a non-VOB or non-SDVOB. We selected a stratified random sample of 20,883 establishments that were unclassified according to veteran status and 20,938 that were unclassified according to service-disabled veteran status from the Baseline Business Universe to verify the VOB and SDVOB status of their owner(s). Of the 20,883 putative non-VOB establishments, we obtained 6,592 complete interviews, for a response rate of 31.6 percent. Of the 20,938 putative non-SDVOB establishments, we obtained 6,621 complete interviews, for a response rate of 31.6 percent.

Of the 6,592 putative non-VOB establishments interviewed, 421 (6.39%) were owned by veterans. Of the 6,621 putative non-SDVOB establishments interviewed, 89 (1.34%) were owned by veterans. The VOB and SDVOB status of the unclassified establishments responding to the survey was changed, if necessary, according to the survey results.

For the remaining putative non-VOB and non-SDVOB businesses that we did not survey, we estimated the veteran status of their ownership based on the amount of misclassification we observed among the unclassified that we did interview. In this example, our interviews showed that 6.39 percent and 1.34 percent of these establishments, respectively, are indeed actually veteran-owned or service-disabled veteran-owned, respectively, while 93.61 percent and 98.66 percent, respectively, are not. Therefore, we assigned each of the remaining putative non-VOB establishments a 6.39 percent probability of being veteran-owned and a 93.61 percent chance of not being veteran-owned. We assigned each of the remaining putative non-SDVOB establishments a 1.34 percent probability of being service-disabled veteran-owned and a 98.66 percent chance of being not service-disabled veteran-owned. We performed this procedure within each sample stratum and for all putative race and gender categories.

6. Understanding “Capacity”

As noted in the beginning of this chapter, some observers, primarily opponents of efforts to address discrimination in contracting, have argued that, in order to be accurate, availability estimates must be adjusted for “capacity.” These assertions are rarely accompanied by specific suggestions about how such adjustments could be made consistent with professional social science standards. This Study does adjust for certain appropriate characteristics of firms related to capacity (such as industry affiliation, geographic location, owner labor market experience, and educational attainment); however, we are careful to not adjust for capacity factors that are themselves likely to be influenced by discrimination. In our view, all of the “capacity” indicators recommended by program opponents (*e.g.*, firm age, annual individual firm revenues, number of employees, largest contract received, bonding limits) are subject to the impact of discrimination.

Further, the reality is that large, adverse statistical disparities between minority-owned or women-owned businesses and nonminority male-owned businesses have been documented in

numerous research studies and reports since *Croson*.⁶⁴ Business outcomes, however, can be influenced by multiple factors, and it is important that disparity studies examine the likelihood of whether discrimination is an important contributing factor to observed disparities.

Moreover, terms such as “capacity,” “qualifications,” and “ability,” are not well defined in any statistical sense. Does “capacity” mean the level of annual individual firm revenues, employment size, bonding limits, or number of contracts bid or awarded? Does “qualified” or “able” mean possession of a business license, certain amounts of training, types of work experience, or the number of contracts a firm can perform at a given moment? What mix of business attributes properly reflects “capacity”? Does the meaning of such terms differ from industry to industry, locality to locality, or through time? Where and how might such data be reliably gathered? Even if capacity is well-defined and adequate data are gathered, when measuring the existence of discrimination, the statistical method used should not improperly limit the availability measure by incorporating factors that are themselves impacted by discrimination, such as firm age, annual individual firm revenues, bonding limits, or number of employees.

Consider an extreme example where discrimination has prevented the emergence of any minority owned firms. Suppose that racial discrimination was ingrained in a city's construction market. As a result, few minority construction employees are given the opportunity to gain managerial experience in the business; minorities who do end up starting construction firms are denied the opportunity to work as subcontractors for nonminority prime contractors; and nonminority prime contractors refuse to work with minority firms and put pressure on bonding companies and banks to prevent minority owned construction firms from securing bonding and capital. In this example, discrimination has prevented the emergence of a minority highway construction industry with “capacity.” Those M/WBEs that exist at all will be smaller and less experienced and have lower annual individual firm revenues, bonding limits, and employees (*i.e.*, “capacity”) because of discrimination than firms that have benefited from the exclusionary system.

Using annual individual firm revenues as the measure of qualifications illustrates the point. If M/WBEs are subject to market area discrimination, their annual individual firm revenues will be smaller than nonminority, male-owned businesses because they will be less successful at obtaining work. Annual individual firm revenues measure the extent to which a firm has succeeded in the market area, perhaps in spite of discrimination—it does not measure the ability to succeed in the absence of discrimination and should not be used to evaluate the effects of discrimination.

Therefore, focusing on the “capacity” of businesses in terms of employment, annual individual firm revenues, bonding limits, number of trucks, and so forth, is simply wrong as a matter of economics because it can obscure the existence of discrimination. A truly “effective” discriminatory system would lead to a finding of no “capacity,” and under the “capacity” approach, a finding of no discrimination. Excluding firms from an availability measure based on their “capacity” in a discriminatory market merely affirms the results of discrimination rather than ameliorating them. A capacity requirement could preclude the City of Austin from doing anything to rectify its passive participation through public dollars in a clearly discriminatory

⁶⁴ See Enchautegui, et al. (1996). More recently, see Wainwright (2012), Wainwright (2010).

system. The capacity argument fails to acknowledge that discrimination has obstructed the emergence of “qualified, willing, and able” minority firms. Without such firms, there can be no statistical disparity.

Further, in dynamic business environments, and especially in the construction sector, such “qualifications” or “capacity” can be obtained relatively easily. It is well known that small construction companies can expand rapidly as needs arise by hiring workers and renting equipment, and many general contractors subcontract the majority of a project. Firms grow quickly when demand increases and shrink quickly when demand decreases. Subcontracting is one important source of this elasticity, as has been noted by several academic studies.⁶⁵ Other industry sectors, especially in this era of Internet commerce and independent contractors, can also quickly grow or shrink in response to demand.

Finally, even where “capacity”-type factors have been controlled for in statistical analyses, results consistent with business discrimination are still typically observed. For example, large and statistically significant differences in commercial loan denial rates between minority and nonminority firms are evident throughout the country, even when detailed balance sheet and creditworthiness measures are held constant.⁶⁶ Similarly, economists using decennial census data have demonstrated that statistically significant disparities in business formation and business owner earnings between minorities and non-minorities remain even after controlling for a host of additional relevant factors, including educational achievement, labor market experience, marital status, disability status, veteran status, interest and dividend income, labor market attachment, industry, geographic location, and local labor market variables such as the unemployment rate, population growth rate, government employment rate, or per capita income.⁶⁷

To summarize, the statistical analysis of the availability of minority firms compared to nonminority firms to examine the existence and effects of discrimination in disparity studies should not adjust for inappropriate “capacity” factors because:

- “Capacity” has been ill-defined; and reliable data for measurement are generally unavailable;
- Small firms, particularly in the construction industry, are highly elastic with regard to ability to perform;
- Many disparity studies have shown that even when “capacity” and “qualifications”-type factors are held constant in statistical analyses, evidence of disparate impact against M/WBE firms persists; and
- Most important, identifiable indicators of “capacity” are themselves impacted by discrimination.

⁶⁵ See Bourdon and Levitt (1980); *see also* Eccles (1981); and Gould (1980).

⁶⁶ See Wainwright (2008).

⁶⁷ Wainwright (2000).

C. Estimates of M/WBE Availability

Top-level estimates of M/WBE availability appear below in Table 3.11. Two sets of weighted availability measures are provided for each of the four major procurement categories of Construction, Professional Services, Nonprofessional Services and Commodities. The first set is weighted by award dollars for all contracts. The second set is weighted by paid dollars for substantially completed contracts.

Table 3.11. Overall Estimated M/WBE Availability Percentages

	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority	Non-minority Female	M/WBE	Non-M/WBE
OVERALL								
AWARD DOLLARS	2.74	8.87	2.33	0.39	14.32	10.87	25.20	74.80
PAID DOLLARS	2.91	9.10	2.37	0.39	14.78	11.20	25.98	74.02
CONSTRUCTION								
AWARD DOLLARS	2.27	10.94	1.14	0.56	14.92	9.61	24.53	75.47
PAID DOLLARS	2.30	10.80	1.11	0.59	14.80	9.56	24.35	75.65
PROFESSIONAL SERVICES								
AWARD DOLLARS	1.60	7.18	2.81	0.38	11.97	6.93	18.90	81.10
PAID DOLLARS	1.64	7.54	2.90	0.40	12.49	6.74	19.22	80.78
NONPROFESSIONAL SERVICES								
AWARD DOLLARS	3.91	8.95	2.40	0.30	15.56	14.39	29.95	70.05
PAID DOLLARS	4.33	9.40	2.50	0.25	16.49	15.48	31.96	68.04
COMMODITIES								
AWARD DOLLARS	1.74	8.28	3.13	0.42	13.57	9.03	22.60	77.40
PAID DOLLARS	1.89	8.16	3.16	0.47	13.68	9.20	22.88	77.12

Sources: Dun & Bradstreet; M/WBE business directory information compiled by NERA; Master Contract/Subcontract Database; Master Concessions Database.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Overall, M/WBE availability in the construction sector is between 24.35 and 24.53 percent. Non-M/WBE availability is between 75.47 and 75.65 percent. Among M/WBEs, availability of African American-owned businesses is between 2.27 and 2.30 percent, availability of Hispanic-

owned businesses is between 10.80 and 10.94 percent, availability of Asian/Pacific Islander-owned businesses is between 1.11 and 1.14 percent, and availability of Native American-owned businesses is between 0.56 and 0.59 percent. Availability of minority-owned businesses as a group is between 14.80 and 14.92 percent. Availability of nonminority female-owned businesses is between 9.56 and 9.61 percent.

Overall, M/WBE availability in the Professional Services sector is between 18.90 and 19.22 percent. Non-M/WBE availability is between 80.78 and 81.10 percent. Among M/WBEs, availability of African American-owned businesses is between 1.60 and 1.64 percent, availability of Hispanic-owned businesses is between 7.18 and 7.54 percent, availability of Asian/Pacific Islander-owned businesses is between 2.81 and 2.90 percent and availability of Native American-owned businesses is between 0.38 and 0.40 percent. Availability of minority-owned businesses as a group is between 11.97 and 12.49 percent. Availability of nonminority female-owned businesses is between 6.74 and 6.93 percent.

Overall, M/WBE availability in the Nonprofessional Services sector is between 29.95 and 31.96 percent. Non-M/WBE availability is between 68.04 and 70.05 percent. Among M/WBEs, availability of African American-owned businesses is between 3.91 and 4.33 percent, availability of Hispanic-owned businesses is between 8.95 and 9.40 percent, availability of Asian/Pacific Islander-owned businesses is between 2.40 and 2.50 percent and availability of Native American-owned businesses is between 0.25 and 0.30 percent. Availability of minority-owned businesses as a group is between 15.56 and 16.49 percent. Availability of nonminority female-owned businesses is between 14.39 and 15.48 percent.

Overall, M/WBE availability in the Commodities sector is between 22.60 and 22.88 percent. Non-M/WBE availability is between 77.12 and 77.40 percent. Among M/WBEs, availability of African American-owned businesses is between 1.74 and 1.89 percent, availability of Hispanic-owned businesses is between 8.16 and 8.28 percent, availability of Asian/Pacific Islander-owned businesses is between 3.13 and 3.16 percent, and availability of Native American-owned businesses is between 0.42 and 0.47 percent. Availability of minority-owned businesses as a group is between 13.57 and 13.68 percent. Availability of nonminority female-owned businesses is between 9.03 and 9.20 percent.

Tables 3.12 through 3.15 present detailed estimates of M/WBE availability in the City of Austin's relevant market area for Construction, Professional Services, Nonprofessional Services and Commodities.⁶⁸

Table 3.11A provides availability estimates for VOBs and SDVOBS comparable to that presented in Table 3.11 for M/WBEs.

⁶⁸ Similar tables using paid dollar weights were also produced but are not included here for space considerations.

Table 3.11A. Overall Estimated VOB and SDVOB Availability Percentages

	Veteran	Service-Disabled Veteran
OVERALL		
AWARD DOLLARS	7.36	1.77
PAID DOLLARS	6.96	1.53
CONSTRUCTION		
AWARD DOLLARS	5.80	1.10
PAID DOLLARS	5.74	1.07
PROFESSIONAL SERVICES		
AWARD DOLLARS	9.46	1.85
PAID DOLLARS	9.35	1.74
NONPROFESSIONAL SERVICES		
AWARD DOLLARS	7.23	1.83
PAID DOLLARS	6.39	1.24
COMMODITIES		
AWARD DOLLARS	6.29	2.30
PAID DOLLARS	6.45	2.46

Sources and Notes: See Table 3.11.

Table 3.11A shows that overall availability for VOBS in the City of Austin market area is between 6.96 and 7.36 percent. For SDVOBs, the comparable estimates are 1.53 to 1.77 percent.

In Construction, the estimates are somewhat lower. For VOBs, availability is estimated to be between 5.74 and 5.80 percent. For SDVOBs, estimated availability is between 1.07 and 1.10 percent. In Professional Services, VOB availability is estimated to be between 9.35 and 9.46 percent. For SDVOBs, estimated availability is between 1.74 and 1.85 percent. In Nonprofessional Services, VOB availability is estimated to be between 6.39 and 7.23 percent. For SDVOBs, estimated availability is between 1.24 and 1.83 percent. In Commodities, VOB availability is estimated to be between 6.29 and 6.45 percent. For SDVOBs, estimated availability is between 2.30 and 2.46 percent.

Tables 3.12A through 3.15A present detailed estimates of VOB and SDVOB availability in the City of Austin's relevant market area for Construction, Professional Services, Nonprofessional Services and Commodities.⁶⁹

⁶⁹ Similar tables using paid dollar weights were also produced but are not included here for space considerations.

Table 3.12. Detailed M/WBE Availability Percentages—Construction (All Contracts) (Dollars Awarded)

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Utility System Construction (NAICS 2371)	0.00	8.04	0.00	0.00	12.04	20.08	79.92
Highway, Street, and Bridge Construction (NAICS 2373)	3.26	11.88	2.04	0.68	14.68	32.54	67.46
Nonresidential Building Construction (NAICS 2362)	0.63	8.06	0.25	0.22	14.90	24.05	75.95
Other Heavy and Civil Engineering Construction (NAICS 2379)	0.00	9.80	1.96	0.00	9.15	20.92	79.08
Building Equipment Contractors (NAICS 2382)	1.41	7.57	0.82	0.37	7.24	17.43	82.57
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	1.22	15.47	1.36	0.62	12.03	30.70	69.30
General Freight Trucking (NAICS 4841)	11.44	21.69	0.34	3.34	7.78	44.59	55.41
Other Specialty Trade Contractors (NAICS 2389)	2.64	17.36	0.11	0.05	10.33	30.48	69.52
Remediation and Other Waste Management Services (NAICS 5629)	19.66	0.48	0.00	0.00	11.11	31.25	68.75
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	11.15	0.00	0.00	0.00	11.15	88.85
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	1.83	8.71	2.52	1.06	14.56	28.67	71.33
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	0.00	3.92	4.79	0.00	4.90	13.62	86.38
Architectural, Engineering, and Related Services (NAICS 5413)	1.48	7.68	3.04	0.70	7.37	20.27	79.73
Communications Equipment Manufacturing (NAICS 3342)	0.00	11.41	0.00	0.00	11.41	22.83	77.17
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	0.00	5.80	10.94	0.00	11.15	27.89	72.11
Services to Buildings and Dwellings (NAICS 5617)	0.30	18.93	0.15	0.15	7.22	26.75	73.25
Residential Building Construction (NAICS 2361)	0.67	15.87	0.30	0.04	10.59	27.47	72.53
Building Finishing Contractors (NAICS 2383)	2.42	33.00	0.93	2.28	10.33	48.96	51.04
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	0.00	0.00	0.00	0.00	7.00	7.00	93.00
Civic and Social Organizations (NAICS 8134)	4.60	4.60	3.07	0.00	11.09	23.35	76.65
Architectural and Structural Metals Manufacturing (NAICS 3323)	2.23	12.20	10.64	0.00	11.76	36.83	63.17

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Steel Product Manufacturing from Purchased Steel (NAICS 3312)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Water, Sewage and Other Systems (NAICS 2213)	0.92	0.00	7.95	0.00	2.75	11.62	88.38
Employment Services (NAICS 5613)	3.23	6.37	2.68	1.34	11.51	25.13	74.87
Other Miscellaneous Manufacturing (NAICS 3399)	9.36	3.78	0.33	0.33	36.18	49.97	50.03
Other Fabricated Metal Product Manufacturing (NAICS 3329)	0.00	0.74	0.56	0.00	18.98	20.28	79.72
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	5.44	12.84	0.20	0.81	8.25	27.54	72.46
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.00	16.67	0.00	11.11	27.78	72.22
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	9.49	9.49	0.00	18.97	37.94	62.06
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	0.00	2.99	1.49	1.49	10.15	16.12	83.88
Other Professional, Scientific, and Technical Services (NAICS 5419)	0.53	5.86	0.43	0.04	9.59	16.46	83.54
Electrical Equipment Manufacturing (NAICS 3353)	4.22	0.00	0.00	0.00	0.00	4.22	95.78
Gasoline Stations (NAICS 4471)	0.51	3.95	2.03	0.00	7.25	13.74	86.26
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)	12.50	0.00	0.00	0.00	0.00	12.50	87.50
Computer Systems Design and Related Services (NAICS 5415)	1.42	0.98	3.25	0.29	16.72	22.66	77.34
Investigation and Security Services (NAICS 5616)	3.32	6.85	0.63	0.00	14.61	25.41	74.59
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)	0.00	8.33	0.00	0.00	16.67	25.00	75.00
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	0.57	15.04	4.25	0.00	14.19	34.05	65.95
Management, Scientific, and Technical Consulting Services (NAICS 5416)	2.94	0.79	1.38	0.00	22.51	27.62	72.38
Automotive Equipment Rental and Leasing (NAICS 5321)	0.00	10.00	0.00	0.00	10.00	20.00	80.00

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.00	6.64	5.71	0.93	9.26	22.53	77.47
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)	0.00	5.03	0.00	0.00	8.98	14.01	85.99
Petroleum and Coal Products Manufacturing (NAICS 3241)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Specialized Freight Trucking (NAICS 4842)	5.88	7.35	2.94	0.00	7.98	24.16	75.84
Other Financial Investment Activities (NAICS 5239)	0.36	20.03	20.07	0.00	1.09	41.56	58.44
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	7.69	0.00	0.00	0.00	0.00	7.69	92.31
Building Material and Supplies Dealers (NAICS 4441)	0.00	4.09	0.49	0.00	9.85	14.42	85.58
Other Support Services (NAICS 5619)	0.27	0.36	0.25	0.01	1.07	1.95	98.05
Direct Selling Establishments (NAICS 4543)	7.05	7.05	0.00	0.00	43.59	57.69	42.31
Lime and Gypsum Product Manufacturing (NAICS 3274)	0.00	0.00	0.00	0.00	50.00	50.00	50.00
Insurance Carriers (NAICS 5241)	0.75	9.70	9.70	0.00	15.17	35.32	64.68

Sources and Notes: See Table 3.11.

Table 3.12A. Detailed VOB and SDVOB Availability Percentages—Construction (All Contracts) (Dollars Awarded)

Detailed Industry Group	Veteran	Service-Disabled Veteran
Utility System Construction (NAICS 2371)	0.00	0.00
Highway, Street, and Bridge Construction (NAICS 2373)	9.10	1.36
Nonresidential Building Construction (NAICS 2362)	3.04	0.70
Other Heavy and Civil Engineering Construction (NAICS 2379)	9.15	0.00
Building Equipment Contractors (NAICS 2382)	7.93	0.86
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	4.29	0.94
General Freight Trucking (NAICS 4841)	7.95	3.41
Other Specialty Trade Contractors (NAICS 2389)	3.26	0.10
Remediation and Other Waste Management Services (NAICS 5629)	0.00	0.00
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	0.00
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	6.99	0.00
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	4.79	0.00
Architectural, Engineering, and Related Services (NAICS 5413)	8.72	0.64
Communications Equipment Manufacturing (NAICS 3342)	31.52	11.41
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	5.88	0.00
Services to Buildings and Dwellings (NAICS 5617)	5.46	0.32
Residential Building Construction (NAICS 2361)	3.42	1.25
Building Finishing Contractors (NAICS 2383)	6.70	1.03
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	7.00	0.00
Civic and Social Organizations (NAICS 8134)	6.13	1.53
Architectural and Structural Metals Manufacturing (NAICS 3323)	9.97	0.00
Steel Product Manufacturing from Purchased Steel (NAICS 3312)	0.00	0.00
Water, Sewage and Other Systems (NAICS 2213)	0.00	0.00
Employment Services (NAICS 5613)	12.00	5.53
Other Miscellaneous Manufacturing (NAICS 3399)	3.82	0.00
Other Fabricated Metal Product Manufacturing (NAICS 3329)	0.92	0.00
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	8.62	0.00
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.00
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	0.00
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	5.67	0.00
Other Professional, Scientific, and Technical Services (NAICS 5419)	1.29	0.25
Electrical Equipment Manufacturing (NAICS 3353)	0.00	0.00
Gasoline Stations (NAICS 4471)	6.89	0.00
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)	0.00	0.00
Computer Systems Design and Related Services (NAICS 5415)	6.11	0.22
Investigation and Security Services (NAICS 5616)	14.99	1.66
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)	0.00	0.00

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	Veteran	Service-Disabled Veteran
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	8.51	2.13
Management, Scientific, and Technical Consulting Services (NAICS 5416)	12.34	0.59
Automotive Equipment Rental and Leasing (NAICS 5321)	0.00	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.93	0.93
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)	17.46	4.24
Petroleum and Coal Products Manufacturing (NAICS 3241)	0.00	0.00
Specialized Freight Trucking (NAICS 4842)	5.88	0.00
Other Financial Investment Activities (NAICS 5239)	19.59	19.59
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	7.69	0.00
Building Material and Supplies Dealers (NAICS 4441)	6.73	0.00
Other Support Services (NAICS 5619)	0.15	0.07
Direct Selling Establishments (NAICS 4543)	7.05	0.00
Lime and Gypsum Product Manufacturing (NAICS 3274)	0.00	0.00
Insurance Carriers (NAICS 5241)	9.70	0.00

Sources and Notes: See Table 3.11.

Table 3.13. Detailed M/WBE Availability Percentages—Professional Services (All Contracts) (Dollars Awarded)

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Architectural, Engineering, and Related Services (NAICS 5413)	1.66	7.14	3.03	0.60	6.87	19.31	80.69
Nonresidential Building Construction (NAICS 2362)	0.22	8.24	0.09	0.08	16.05	24.67	75.33
Building Equipment Contractors (NAICS 2382)	1.17	7.54	0.86	0.25	7.35	17.17	82.83
Management, Scientific, and Technical Consulting Services (NAICS 5416)	3.03	4.59	3.41	0.08	19.07	30.17	69.83
Utility System Construction (NAICS 2371)	0.00	7.69	0.00	0.00	12.08	19.77	80.23
Other Heavy and Civil Engineering Construction (NAICS 2379)	0.00	9.80	1.96	0.00	9.15	20.92	79.08
Other Specialty Trade Contractors (NAICS 2389)	2.74	17.32	0.11	0.05	10.27	30.50	69.50
Legal Services (NAICS 5411)	0.71	1.19	0.07	0.00	13.38	15.36	84.64
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	0.00	3.92	4.79	0.00	4.90	13.62	86.38
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	2.79	10.48	3.21	2.76	22.24	41.48	58.52
Employment Services (NAICS 5613)	4.43	6.09	2.13	1.06	16.17	29.87	70.13
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.00	6.64	5.71	0.93	9.26	22.53	77.47
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	0.56	13.42	0.53	0.96	12.94	28.42	71.58
Residential Building Construction (NAICS 2361)	0.47	15.28	0.00	0.04	10.16	25.95	74.05
Building Finishing Contractors (NAICS 2383)	1.38	29.44	2.11	1.35	9.99	44.27	55.73
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	0.00	5.80	10.94	0.00	11.15	27.89	72.11
Highway, Street, and Bridge Construction (NAICS 2373)	3.26	11.88	2.04	0.68	14.68	32.54	67.46
Remediation and Other Waste Management Services (NAICS 5629)	28.57	0.00	0.00	0.00	14.29	42.86	57.14
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	0.00	8.44	0.00	8.44	15.58	32.47	67.53

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Architectural and Structural Metals Manufacturing (NAICS 3323)	2.50	11.94	11.94	0.00	13.19	39.58	60.42
General Freight Trucking (NAICS 4841)	11.44	21.69	0.34	3.34	7.78	44.59	55.41
Other Financial Investment Activities (NAICS 5239)	0.00	1.08	0.00	0.00	1.08	2.15	97.85
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	14.80	10.71	0.00	0.00	7.14	32.65	67.35
Personal and Household Goods Repair and Maintenance (NAICS 8114)	0.93	4.10	0.23	0.00	8.46	13.72	86.28
Land Subdivision (NAICS 2372)	0.40	7.97	0.00	7.57	23.51	39.46	60.54
Investigation and Security Services (NAICS 5616)	5.33	11.40	0.00	0.00	14.47	31.20	68.80
Advertising, Public Relations, and Related Services (NAICS 5418)	1.68	8.19	0.00	0.00	28.38	38.25	61.75
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	4.92	6.86	1.60	0.00	19.01	32.39	67.61
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Printing and Related Support Activities (NAICS 3231)	0.94	2.34	0.31	0.00	11.53	15.13	84.87
Individual and Family Services (NAICS 6241)	5.48	0.00	0.00	0.00	21.90	27.38	72.62
Direct Selling Establishments (NAICS 4543)	7.05	7.05	0.00	0.00	43.59	57.69	42.31
Services to Buildings and Dwellings (NAICS 5617)	0.30	18.93	0.15	0.15	7.22	26.75	73.25
Office Administrative Services (NAICS 5611)	0.36	4.05	0.15	0.15	8.68	13.38	86.62
Specialized Design Services (NAICS 5414)	0.00	0.00	0.00	1.06	63.45	64.52	35.48
Computer Systems Design and Related Services (NAICS 5415)	1.68	15.52	2.86	0.13	7.26	27.45	72.55
Business Support Services (NAICS 5614)	2.38	8.84	0.00	6.46	24.15	41.84	58.16
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)	0.00	3.57	0.00	0.00	7.14	10.71	89.29
Other Support Services (NAICS 5619)	0.27	0.36	0.25	0.01	1.07	1.95	98.05
Museums, Historical Sites, and Similar Institutions (NAICS 7121)	0.00	0.00	0.00	0.00	11.11	11.11	88.89
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	17.39	0.00	0.00	0.00	17.39	82.61

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	0.57	15.04	4.25	0.00	14.19	34.05	65.95

Sources and Notes: See Table 3.11.

**Table 3.13A. Detailed VOB and SDVOB Availability Percentages—Professional Services (All Contracts)
(Dollars Awarded)**

Detailed Industry Group	Veteran	Service-Disabled Veteran
Architectural, Engineering, and Related Services (NAICS 5413)	8.65	0.82
Nonresidential Building Construction (NAICS 2362)	1.06	0.24
Building Equipment Contractors (NAICS 2382)	7.90	0.90
Management, Scientific, and Technical Consulting Services (NAICS 5416)	17.53	6.17
Utility System Construction (NAICS 2371)	0.00	0.00
Other Heavy and Civil Engineering Construction (NAICS 2379)	9.15	0.00
Other Specialty Trade Contractors (NAICS 2389)	3.36	0.11
Legal Services (NAICS 5411)	17.00	8.47
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	4.79	0.00
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	6.21	0.00
Employment Services (NAICS 5613)	10.83	4.67
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.93	0.93
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	6.27	3.33
Residential Building Construction (NAICS 2361)	0.37	0.04
Building Finishing Contractors (NAICS 2383)	5.04	1.68
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	5.88	0.00
Highway, Street, and Bridge Construction (NAICS 2373)	9.10	1.36
Remediation and Other Waste Management Services (NAICS 5629)	0.00	0.00
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	8.44	0.00
Architectural and Structural Metals Manufacturing (NAICS 3323)	9.44	0.00
General Freight Trucking (NAICS 4841)	7.95	3.41
Other Financial Investment Activities (NAICS 5239)	1.08	0.00
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	22.45	0.00
Personal and Household Goods Repair and Maintenance (NAICS 8114)	6.79	0.00
Land Subdivision (NAICS 2372)	15.14	0.00
Investigation and Security Services (NAICS 5616)	22.93	3.82
Advertising, Public Relations, and Related Services (NAICS 5418)	17.02	0.00
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	4.40	0.00
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.00
Printing and Related Support Activities (NAICS 3231)	2.67	2.35
Individual and Family Services (NAICS 6241)	10.95	0.00
Direct Selling Establishments (NAICS 4543)	7.05	0.00
Services to Buildings and Dwellings (NAICS 5617)	5.46	0.32
Office Administrative Services (NAICS 5611)	6.94	0.15
Specialized Design Services (NAICS 5414)	0.00	0.00
Computer Systems Design and Related Services (NAICS 5415)	2.31	0.94
Business Support Services (NAICS 5614)	4.76	0.00
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)	7.14	0.00

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	Veteran	Service-Disabled Veteran
Other Support Services (NAICS 5619)	0.15	0.07
Museums, Historical Sites, and Similar Institutions (NAICS 7121)	0.00	0.00
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	0.00
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	8.51	2.13

Sources and Notes: See Table 3.11.

Table 3.14. Detailed M/WBE Availability Percentages—Nonprofessional Services (All Contracts) (Dollars Awarded)

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Insurance Carriers (NAICS 5241)	2.55	2.47	0.50	0.00	8.82	14.33	85.67
Nonresidential Building Construction (NAICS 2362)	2.30	7.32	0.93	0.80	10.16	21.51	78.49
Business Support Services (NAICS 5614)	3.57	3.82	0.24	0.04	9.99	17.66	82.34
Building Equipment Contractors (NAICS 2382)	1.07	6.64	1.39	0.25	6.79	16.15	83.85
Services to Buildings and Dwellings (NAICS 5617)	0.52	18.19	0.25	0.14	7.20	26.31	73.69
Computer Systems Design and Related Services (NAICS 5415)	1.55	9.30	2.99	0.19	11.32	25.35	74.65
Architectural, Engineering, and Related Services (NAICS 5413)	1.69	7.84	3.61	0.70	8.32	22.16	77.84
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	3.36	4.69	1.09	0.00	13.98	23.13	76.87
Advertising, Public Relations, and Related Services (NAICS 5418)	0.57	5.13	2.27	0.00	32.40	40.36	59.64
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.42	0.42	0.00	0.75	1.60	98.40
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)	2.01	7.87	7.29	3.76	8.10	29.03	70.97
Management, Scientific, and Technical Consulting Services (NAICS 5416)	5.27	6.59	6.68	0.27	17.51	36.33	63.67
Other Personal Services (NAICS 8129)	2.96	4.90	0.00	0.00	9.41	17.26	82.74
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)	9.53	0.00	0.00	0.00	0.36	9.89	90.11
Software Publishers (NAICS 5112)	1.19	1.05	13.53	0.00	5.04	20.81	79.19
Employment Services (NAICS 5613)	4.74	6.02	1.98	0.99	17.39	31.11	68.89
Individual and Family Services (NAICS 6241)	5.87	2.99	0.54	0.00	27.03	36.43	63.57
Investigation and Security Services (NAICS 5616)	5.24	11.20	0.03	0.00	14.48	30.94	69.06
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	0.57	15.04	4.25	0.00	14.19	34.05	65.95

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Other Telecommunications (NAICS 5179)	2.06	1.84	0.01	3.04	3.12	10.09	89.91
Electric Lighting Equipment Manufacturing (NAICS 3351)	11.11	0.00	11.11	0.00	0.00	22.22	77.78
Activities Related to Credit Intermediation (NAICS 5223)	0.00	0.00	9.29	8.01	10.58	27.88	72.12
Waste Collection (NAICS 5621)	0.00	9.09	0.00	0.00	9.09	18.18	81.82
Waste Treatment and Disposal (NAICS 5622)	0.00	0.00	0.00	0.00	0.75	0.75	99.25
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.12	6.31	5.19	0.94	8.94	21.51	78.49
Highway, Street, and Bridge Construction (NAICS 2373)	3.26	11.88	2.04	0.68	14.68	32.54	67.46
Computer and Peripheral Equipment Manufacturing (NAICS 3341)	1.82	8.00	0.00	0.00	17.31	27.13	72.87
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)	1.30	1.75	0.90	0.00	10.38	14.33	85.67
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	0.83	13.20	0.78	1.28	12.78	28.87	71.13
Religious Organizations (NAICS 8131)	5.49	0.06	3.68	0.00	18.35	27.58	72.42
Utility System Construction (NAICS 2371)	0.00	10.94	0.00	0.00	11.73	22.67	77.33
Other Specialty Trade Contractors (NAICS 2389)	5.42	16.27	0.34	0.16	8.74	30.94	69.06
Vocational Rehabilitation Services (NAICS 6243)	2.13	11.79	0.00	0.00	8.90	22.82	77.18
Remediation and Other Waste Management Services (NAICS 5629)	0.00	7.40	0.00	0.00	8.60	16.00	84.00
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)	0.00	5.09	21.92	0.00	15.99	43.00	57.00
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)	0.90	3.80	2.35	0.00	16.89	23.95	76.05
Residential Building Construction (NAICS 2361)	1.23	16.19	1.20	0.03	11.83	30.47	69.53
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	0.66	6.77	1.13	5.15	12.40	26.11	73.89
Communications Equipment Manufacturing (NAICS 3342)	0.00	11.41	0.00	0.00	11.41	22.83	77.17
Automotive Repair and Maintenance (NAICS 8111)	1.02	10.84	0.75	0.67	12.53	25.80	74.20
Building Finishing Contractors (NAICS 2383)	2.21	25.66	0.44	1.68	11.20	41.18	58.82

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Offices of Physicians (NAICS 6211)	0.29	6.51	15.25	0.00	11.83	33.87	66.13
Other Heavy and Civil Engineering Construction (NAICS 2379)	0.00	9.80	1.96	0.00	9.15	20.92	79.08
Architectural and Structural Metals Manufacturing (NAICS 3323)	2.50	11.94	11.94	0.00	13.19	39.58	60.42
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Other Schools and Instruction (NAICS 6116)	5.72	13.47	2.94	0.00	25.09	47.21	52.79
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)	0.00	3.41	2.73	0.00	8.12	14.25	85.75
Other Chemical Product and Preparation Manufacturing (NAICS 3259)	6.25	6.25	6.25	6.25	12.50	37.50	62.50
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)	14.80	17.12	13.21	0.00	20.61	65.75	34.25
Radio and Television Broadcasting (NAICS 5151)	0.00	8.05	0.00	0.00	3.30	11.35	88.65
Other Professional, Scientific, and Technical Services (NAICS 5419)	3.45	11.71	4.96	0.01	29.66	49.80	50.20
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	0.00	4.19	0.11	0.00	9.14	13.45	86.55
Land Subdivision (NAICS 2372)	0.40	7.97	0.00	7.57	23.51	39.46	60.54
Other General Purpose Machinery Manufacturing (NAICS 3339)	0.00	0.00	0.00	0.00	50.00	50.00	50.00
Legal Services (NAICS 5411)	0.71	1.19	0.07	0.00	13.38	15.36	84.64
Electric Power Generation, Transmission and Distribution (NAICS 2211)	0.00	8.80	4.00	0.00	14.80	27.60	72.40
Automotive Equipment Rental and Leasing (NAICS 5321)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
General Freight Trucking (NAICS 4841)	11.44	21.69	0.34	3.34	7.78	44.59	55.41
Offices of Other Health Practitioners (NAICS 6213)	0.14	0.00	4.49	1.18	53.94	59.75	40.25
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)	3.97	15.37	5.12	0.00	12.80	37.26	62.74
Child Day Care Services (NAICS 6244)	1.13	1.91	0.69	0.13	8.82	12.68	87.32

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)	0.00	14.80	0.00	0.00	3.31	18.11	81.89
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)	0.00	36.66	0.00	0.00	11.52	48.18	51.82
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	0.00	0.00	0.00	0.00	7.00	7.00	93.00
Gasoline Stations (NAICS 4471)	0.51	3.95	2.03	0.00	7.25	13.74	86.26
Special Food Services (NAICS 7223)	11.81	3.46	0.09	0.00	13.04	28.39	71.61
Social Advocacy Organizations (NAICS 8133)	0.55	2.71	1.26	0.00	5.06	9.59	90.41
Medical and Diagnostic Laboratories (NAICS 6215)	0.00	1.32	1.32	0.00	3.95	6.58	93.42
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	0.62	3.45	3.45	0.00	6.02	13.54	86.46
Depository Credit Intermediation (NAICS 5221)	0.75	3.73	0.25	0.00	7.71	12.44	87.56
Printing and Related Support Activities (NAICS 3231)	0.94	2.34	0.31	0.00	11.53	15.13	84.87
Department Stores (NAICS 4521)	1.03	5.49	0.00	0.00	7.58	14.10	85.90
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	7.69	0.00	0.00	0.00	0.00	7.69	92.31
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	0.00	0.93	0.93	3.67	13.78	19.30	80.70
Support Activities for Road Transportation (NAICS 4884)	11.43	18.81	0.00	0.00	28.33	58.57	41.43
Direct Selling Establishments (NAICS 4543)	2.59	4.78	0.00	0.00	22.23	29.60	70.40
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)	3.23	9.68	1.61	0.00	23.39	37.90	62.10
Drycleaning and Laundry Services (NAICS 8123)	0.00	0.00	0.00	0.00	10.00	10.00	90.00
Electrical Equipment Manufacturing (NAICS 3353)	3.89	0.00	0.00	0.00	0.00	3.89	96.11
Support Activities for Air Transportation (NAICS 4881)	1.27	0.00	0.00	0.00	13.16	14.43	85.57
Civic and Social Organizations (NAICS 8134)	4.60	4.60	3.07	0.00	11.09	23.35	76.65
Electronics and Appliance Stores (NAICS 4431)	0.00	0.74	0.00	0.14	5.29	6.17	93.83
Grantmaking and Giving Services (NAICS 8132)	5.56	0.00	0.00	0.00	0.00	5.56	94.44

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Automobile Dealers (NAICS 4411)	3.83	12.27	1.91	0.00	4.61	22.63	77.37
General Medical and Surgical Hospitals (NAICS 6221)	0.00	3.08	0.00	8.67	1.54	13.29	86.71
Lessors of Real Estate (NAICS 5311)	0.00	0.85	0.00	0.00	9.40	10.26	89.74
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)	5.58	5.58	1.19	0.00	22.99	35.34	64.66
Cable and Other Subscription Programming (NAICS 5152)	0.00	0.00	1.54	1.54	1.54	4.62	95.38
Specialized Freight Trucking (NAICS 4842)	7.27	21.82	0.00	1.82	9.09	40.00	60.00
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)	0.00	0.00	0.00	0.00	18.18	18.18	81.82
Death Care Services (NAICS 8122)	0.00	9.52	0.00	0.00	9.52	19.05	80.95
Aerospace Product and Parts Manufacturing (NAICS 3364)	0.00	11.11	0.00	0.00	11.11	22.22	77.78
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	0.00	5.80	10.94	0.00	11.15	27.89	72.11
Medical Equipment and Supplies Manufacturing (NAICS 3391)	0.00	6.90	0.00	0.00	10.34	17.24	82.76
Other Residential Care Facilities (NAICS 6239)	5.26	0.00	0.00	0.00	15.79	21.05	78.95
Museums, Historical Sites, and Similar Institutions (NAICS 7121)	10.93	0.00	0.00	0.00	23.49	34.42	65.58
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	0.00	2.99	1.49	1.49	10.15	16.12	83.88
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)	0.00	0.00	0.00	0.00	8.33	8.33	91.67
Specialized Design Services (NAICS 5414)	0.00	0.00	0.00	1.06	63.45	64.52	35.48
Other Amusement and Recreation Industries (NAICS 7139)	0.36	1.19	0.36	0.00	97.97	99.88	0.12
Paper and Paper Product Merchant Wholesalers (NAICS 4241)	11.32	5.66	3.77	0.00	35.66	56.42	43.58
Business Schools and Computer and Management Training (NAICS 6114)	0.00	9.09	4.55	4.55	13.64	31.82	68.18
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	9.49	9.49	0.00	18.97	37.94	62.06

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Converted Paper Product Manufacturing (NAICS 3222)	0.00	0.00	0.00	0.00	25.00	25.00	75.00
Restaurants and Other Eating Places (NAICS 7225)	0.61	2.77	2.70	0.04	0.71	6.84	93.16
Water, Sewage and Other Systems (NAICS 2213)	0.92	0.00	7.95	0.00	2.75	11.62	88.38
Activities Related to Real Estate (NAICS 5313)	0.68	1.36	0.00	0.00	33.93	35.97	64.03
Electronic Shopping and Mail-Order Houses (NAICS 4541)	0.00	3.57	0.00	0.00	7.14	10.71	89.29
Rubber Product Manufacturing (NAICS 3262)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)	0.00	3.57	0.00	0.00	7.14	10.71	89.29
Nondepository Credit Intermediation (NAICS 5222)	8.07	0.63	0.00	0.00	2.52	11.22	88.78

Sources and Notes: See Table 3.11.

Table 3.14A. Detailed VOB and SDVOB Availability Percentages—Nonprofessional Services (All Contracts) (Dollars Awarded)

Detailed Industry Group	Veteran	Service-Disabled Veteran
Insurance Carriers (NAICS 5241)	8.41	5.93
Nonresidential Building Construction (NAICS 2362)	11.18	2.58
Business Support Services (NAICS 5614)	1.90	0.07
Building Equipment Contractors (NAICS 2382)	6.83	1.27
Services to Buildings and Dwellings (NAICS 5617)	5.27	0.31
Computer Systems Design and Related Services (NAICS 5415)	3.95	0.66
Architectural, Engineering, and Related Services (NAICS 5413)	7.46	0.65
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	3.01	0.00
Advertising, Public Relations, and Related Services (NAICS 5418)	3.85	1.75
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.06	0.00
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)	12.06	0.51
Management, Scientific, and Technical Consulting Services (NAICS 5416)	16.81	10.38
Other Personal Services (NAICS 8129)	0.09	0.09
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)	0.00	0.00
Software Publishers (NAICS 5112)	6.36	3.47
Employment Services (NAICS 5613)	10.52	4.45
Individual and Family Services (NAICS 6241)	7.63	0.00
Investigation and Security Services (NAICS 5616)	22.57	3.72
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (NAICS 8113)	8.51	2.13
Other Telecommunications (NAICS 5179)	2.04	2.04
Electric Lighting Equipment Manufacturing (NAICS 3351)	0.00	0.00
Activities Related to Credit Intermediation (NAICS 5223)	8.01	0.00
Waste Collection (NAICS 5621)	0.00	0.00
Waste Treatment and Disposal (NAICS 5622)	0.00	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	1.00	0.82
Highway, Street, and Bridge Construction (NAICS 2373)	9.10	1.36
Computer and Peripheral Equipment Manufacturing (NAICS 3341)	0.77	0.00
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)	2.60	0.00
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	5.09	2.20
Religious Organizations (NAICS 8131)	3.62	0.00
Utility System Construction (NAICS 2371)	0.00	0.00
Other Specialty Trade Contractors (NAICS 2389)	5.84	0.33
Vocational Rehabilitation Services (NAICS 6243)	15.73	7.86
Remediation and Other Waste Management Services (NAICS 5629)	11.85	0.00
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)	0.00	0.00
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)	10.06	1.68
Residential Building Construction (NAICS 2361)	7.50	3.15

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	Veteran	Service-Disabled Veteran
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	6.75	0.00
Communications Equipment Manufacturing (NAICS 3342)	31.52	11.41
Automotive Repair and Maintenance (NAICS 8111)	2.64	0.11
Building Finishing Contractors (NAICS 2383)	6.44	2.27
Offices of Physicians (NAICS 6211)	3.09	0.05
Other Heavy and Civil Engineering Construction (NAICS 2379)	9.15	0.00
Architectural and Structural Metals Manufacturing (NAICS 3323)	9.44	0.00
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)	0.00	0.00
Other Schools and Instruction (NAICS 6116)	2.78	0.00
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)	6.82	0.00
Other Chemical Product and Preparation Manufacturing (NAICS 3259)	0.00	0.00
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)	19.45	0.00
Radio and Television Broadcasting (NAICS 5151)	0.00	0.00
Other Professional, Scientific, and Technical Services (NAICS 5419)	2.85	0.06
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	12.23	4.22
Land Subdivision (NAICS 2372)	15.14	0.00
Other General Purpose Machinery Manufacturing (NAICS 3339)	0.00	0.00
Legal Services (NAICS 5411)	17.00	8.47
Electric Power Generation, Transmission and Distribution (NAICS 2211)	2.00	0.00
Automotive Equipment Rental and Leasing (NAICS 5321)	9.32	0.00
General Freight Trucking (NAICS 4841)	7.95	3.41
Offices of Other Health Practitioners (NAICS 6213)	2.36	0.00
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)	2.55	0.00
Child Day Care Services (NAICS 6244)	1.82	0.00
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)	8.19	4.88
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)	5.76	0.00
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	7.00	0.00
Gasoline Stations (NAICS 4471)	6.89	0.00
Special Food Services (NAICS 7223)	0.00	0.00
Social Advocacy Organizations (NAICS 8133)	0.00	0.00
Medical and Diagnostic Laboratories (NAICS 6215)	0.00	0.00
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	4.08	0.00
Depository Credit Intermediation (NAICS 5221)	0.00	0.00
Printing and Related Support Activities (NAICS 3231)	2.67	2.35
Department Stores (NAICS 4521)	6.85	0.00
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	7.69	0.00
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	3.67	0.00
Support Activities for Road Transportation (NAICS 4884)	3.81	0.95
Direct Selling Establishments (NAICS 4543)	6.75	0.00

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	Veteran	Service-Disabled Veteran
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)	0.00	0.00
Drycleaning and Laundry Services (NAICS 8123)	10.00	0.00
Electrical Equipment Manufacturing (NAICS 3353)	0.00	0.00
Support Activities for Air Transportation (NAICS 4881)	13.16	6.58
Civic and Social Organizations (NAICS 8134)	6.13	1.53
Electronics and Appliance Stores (NAICS 4431)	0.72	0.00
Grantmaking and Giving Services (NAICS 8132)	0.00	0.00
Automobile Dealers (NAICS 4411)	9.57	1.91
General Medical and Surgical Hospitals (NAICS 6221)	0.00	0.00
Lessors of Real Estate (NAICS 5311)	0.00	0.00
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)	5.58	5.58
Cable and Other Subscription Programming (NAICS 5152)	0.00	0.00
Specialized Freight Trucking (NAICS 4842)	5.45	0.00
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)	0.00	0.00
Death Care Services (NAICS 8122)	14.29	0.00
Aerospace Product and Parts Manufacturing (NAICS 3364)	0.00	0.00
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	5.88	0.00
Medical Equipment and Supplies Manufacturing (NAICS 3391)	3.45	0.00
Other Residential Care Facilities (NAICS 6239)	21.05	5.26
Museums, Historical Sites, and Similar Institutions (NAICS 7121)	10.93	0.00
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	5.67	0.00
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)	0.00	0.00
Specialized Design Services (NAICS 5414)	0.00	0.00
Other Amusement and Recreation Industries (NAICS 7139)	0.84	0.12
Paper and Paper Product Merchant Wholesalers (NAICS 4241)	0.00	0.00
Business Schools and Computer and Management Training (NAICS 6114)	4.55	0.00
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	0.00
Converted Paper Product Manufacturing (NAICS 3222)	0.00	0.00
Restaurants and Other Eating Places (NAICS 7225)	0.12	0.00
Water, Sewage and Other Systems (NAICS 2213)	0.00	0.00
Activities Related to Real Estate (NAICS 5313)	28.49	5.70
Electronic Shopping and Mail-Order Houses (NAICS 4541)	7.14	0.00
Rubber Product Manufacturing (NAICS 3262)	0.00	0.00
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)	7.14	0.00
Nondepository Credit Intermediation (NAICS 5222)	0.00	0.00

Sources and Notes: See Table 3.11.

Table 3.15. Detailed M/WBE Availability Percentages—Commodities (All Contracts) (Dollars Awarded)

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.02	6.59	5.63	0.93	9.21	22.37	77.63
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	0.00	0.00	0.00	0.00	16.51	16.51	83.49
Utility System Construction (NAICS 2371)	0.00	7.79	0.00	0.00	12.07	19.85	80.15
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	1.43	9.34	2.27	3.17	15.38	31.59	68.41
Automobile Dealers (NAICS 4411)	3.83	12.27	1.91	0.00	4.61	22.63	77.37
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)	0.65	20.19	0.16	0.32	8.54	29.87	70.13
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)	4.71	8.32	4.04	2.25	11.06	30.37	69.63
Nonresidential Building Construction (NAICS 2362)	1.82	7.53	0.74	0.63	11.51	22.23	77.77
Communications Equipment Manufacturing (NAICS 3342)	0.00	8.04	0.00	0.00	18.59	26.63	73.37
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.00	0.33	5.81	0.00	4.08	10.22	89.78
Building Equipment Contractors (NAICS 2382)	0.55	5.30	2.21	0.06	6.16	14.28	85.72
Management, Scientific, and Technical Consulting Services (NAICS 5416)	5.40	5.94	6.51	0.03	20.00	37.89	62.11
Computer Systems Design and Related Services (NAICS 5415)	1.63	12.71	2.94	0.16	9.09	26.53	73.47
Computer and Peripheral Equipment Manufacturing (NAICS 3341)	3.68	3.61	0.00	0.00	0.83	8.12	91.88
Electrical Equipment Manufacturing (NAICS 3353)	0.76	0.00	0.00	0.00	0.00	0.76	99.24
Highway, Street, and Bridge Construction (NAICS 2373)	3.26	11.88	2.04	0.68	14.68	32.54	67.46
Petroleum and Coal Products Manufacturing (NAICS 3241)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Plastics Product Manufacturing (NAICS 3261)	0.00	0.00	0.00	0.00	30.48	30.48	69.52

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Sawmills and Wood Preservation (NAICS 3211)	0.00	14.29	0.00	0.00	0.00	14.29	85.71
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)	5.65	5.50	1.17	0.00	22.83	35.15	64.85
Lime and Gypsum Product Manufacturing (NAICS 3274)	0.00	0.00	0.00	0.00	50.00	50.00	50.00
Architectural, Engineering, and Related Services (NAICS 5413)	1.73	7.13	3.38	0.42	5.39	18.04	81.96
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)	3.23	9.68	1.61	0.00	23.39	37.90	62.10
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)	1.08	5.68	0.23	0.00	45.76	52.75	47.25
Software Publishers (NAICS 5112)	1.19	1.05	13.53	0.00	5.04	20.81	79.19
Paper and Paper Product Merchant Wholesalers (NAICS 4241)	4.03	4.70	1.34	0.00	24.33	34.40	65.60
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	1.56	7.81	0.00	7.97	10.94	28.28	71.72
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	1.20	15.51	0.38	1.52	8.48	27.10	72.90
Other Telecommunications (NAICS 5179)	2.08	1.04	0.00	3.12	3.12	9.38	90.62
Direct Selling Establishments (NAICS 4543)	5.17	6.10	0.00	0.00	34.59	45.86	54.14
Basic Chemical Manufacturing (NAICS 3251)	6.81	3.41	3.41	0.00	10.22	23.84	76.16
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)	5.50	11.40	0.35	1.04	11.62	29.90	70.10
Business Support Services (NAICS 5614)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Other Chemical Product and Preparation Manufacturing (NAICS 3259)	6.25	6.25	6.25	6.25	12.50	37.50	62.50
Aerospace Product and Parts Manufacturing (NAICS 3364)	0.00	4.67	0.00	0.00	4.67	9.34	90.66
Other General Purpose Machinery Manufacturing (NAICS 3339)	0.00	0.00	0.00	0.00	21.37	21.37	78.63
Clothing Stores (NAICS 4481)	3.69	28.00	0.04	3.60	24.96	60.29	39.71
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	0.28	3.64	4.04	0.00	6.02	13.98	86.02
Other Financial Investment Activities (NAICS 5239)	0.36	20.03	20.07	0.00	1.09	41.56	58.44
Automotive Repair and Maintenance (NAICS 8111)	2.16	2.24	0.73	0.16	7.79	13.09	86.91

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	0.00	3.40	0.24	1.99	15.37	21.01	78.99
Other Electrical Equipment and Component Manufacturing (NAICS 3359)	0.00	10.89	0.00	0.00	24.22	35.12	64.88
Other Specialty Trade Contractors (NAICS 2389)	6.80	15.72	0.46	0.22	7.96	31.16	68.84
Electronic Shopping and Mail-Order Houses (NAICS 4541)	1.09	1.09	12.42	0.00	40.06	54.66	45.34
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	8.50	0.00	0.00	0.00	8.50	91.50
Building Material and Supplies Dealers (NAICS 4441)	2.34	6.47	0.00	0.00	4.30	13.10	86.90
Medical Equipment and Supplies Manufacturing (NAICS 3391)	0.00	3.06	0.00	0.00	9.65	12.71	87.29
Residential Building Construction (NAICS 2361)	0.47	15.28	0.00	0.04	10.16	25.95	74.05
Individual and Family Services (NAICS 6241)	7.17	5.23	1.79	0.00	38.12	52.31	47.69
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	1.47	0.00	0.00	0.00	8.08	9.56	90.44
General Freight Trucking (NAICS 4841)	11.44	21.69	0.34	3.34	7.78	44.59	55.41
Waste Treatment and Disposal (NAICS 5622)	0.00	0.00	6.25	6.25	12.50	25.00	75.00
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	0.00	5.80	10.94	0.00	11.15	27.89	72.11
Pharmaceutical and Medicine Manufacturing (NAICS 3254)	0.00	9.26	9.26	0.00	9.26	27.78	72.22
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	0.00	9.09	0.00	0.00	9.09	18.18	81.82
Other Miscellaneous Store Retailers (NAICS 4539)	0.44	0.43	0.00	4.20	11.57	16.64	83.36
Rubber Product Manufacturing (NAICS 3262)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	1.23	18.97	0.91	0.64	13.30	35.05	64.95
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)	0.00	8.33	0.00	0.00	16.67	25.00	75.00
Electronics and Appliance Stores (NAICS 4431)	0.00	0.74	0.00	0.14	5.29	6.17	93.83

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Other Fabricated Metal Product Manufacturing (NAICS 3329)	0.00	0.00	0.00	0.00	15.26	15.26	84.74
Personal and Household Goods Repair and Maintenance (NAICS 8114)	8.53	23.05	1.96	0.00	14.69	48.24	51.76
Other Support Services (NAICS 5619)	0.27	0.36	0.25	0.01	1.07	1.95	98.05
Other Miscellaneous Manufacturing (NAICS 3399)	0.00	4.97	0.00	1.85	8.67	15.50	84.50
Electric Power Generation, Transmission and Distribution (NAICS 2211)	0.00	8.80	4.00	0.00	14.80	27.60	72.40
Remediation and Other Waste Management Services (NAICS 5629)	0.00	6.38	0.00	0.00	17.02	23.40	76.60
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)	16.67	16.67	0.00	0.00	0.00	33.33	66.67
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	9.49	9.49	0.00	18.97	37.94	62.06
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)	0.00	4.74	0.00	0.00	8.45	13.19	86.81
Metalworking Machinery Manufacturing (NAICS 3335)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Shoe Stores (NAICS 4482)	7.66	0.00	6.17	0.00	9.15	22.99	77.01
Steel Product Manufacturing from Purchased Steel (NAICS 3312)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Electric Lighting Equipment Manufacturing (NAICS 3351)	10.15	0.00	7.28	0.00	2.87	20.31	79.69
Depository Credit Intermediation (NAICS 5221)	0.00	7.57	0.51	0.00	15.66	23.75	76.25
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)	8.33	16.67	0.00	0.00	16.67	41.67	58.33
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)	0.00	3.06	0.00	0.00	6.12	9.18	90.82
Motor Vehicle Manufacturing (NAICS 3361)	0.00	16.67	0.00	0.00	0.00	16.67	83.33
Other Professional, Scientific, and Technical Services (NAICS 5419)	0.34	1.28	0.38	0.05	3.59	5.64	94.36
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)	0.90	3.80	2.35	0.00	16.89	23.95	76.05
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	4.92	6.86	1.60	0.00	19.01	32.39	67.61
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)	0.00	0.00	28.57	0.00	0.00	28.57	71.43

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	African American	Hispanic	Asian/ Pacific Islander	Native American	Non-minority Female	M/WBE	Non-M/WBE
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	0.00	2.99	1.49	1.49	10.15	16.12	83.88
Legal Services (NAICS 5411)	0.00	1.75	0.00	0.00	8.04	9.80	90.20
Forging and Stamping (NAICS 3321)	0.00	0.00	11.11	0.00	11.11	22.22	77.78
Services to Buildings and Dwellings (NAICS 5617)	0.30	18.93	0.15	0.15	7.22	26.75	73.25
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)	14.80	17.12	13.21	0.00	20.61	65.75	34.25
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)	0.00	0.00	0.00	0.00	19.96	19.96	80.04
Ship and Boat Building (NAICS 3366)	0.00	0.00	16.67	0.00	0.00	16.67	83.33
Book Stores and News Dealers (NAICS 4512)	0.00	0.88	0.00	0.00	4.42	5.31	94.69
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Lessors of Real Estate (NAICS 5311)	0.10	1.01	0.10	0.00	27.22	28.44	71.56
Architectural and Structural Metals Manufacturing (NAICS 3323)	0.00	14.29	0.00	0.00	0.00	14.29	85.71
Support Activities for Air Transportation (NAICS 4881)	1.27	0.00	0.00	0.00	13.16	14.43	85.57
Other Motor Vehicle Dealers (NAICS 4412)	0.56	0.56	24.16	0.00	12.08	37.36	62.64
Specialized Design Services (NAICS 5414)	1.50	3.18	1.78	0.00	17.99	24.46	75.54
Building Finishing Contractors (NAICS 2383)	0.00	22.80	3.45	0.00	9.83	36.08	63.92
Support Activities for Mining (NAICS 2131)	0.00	0.00	0.00	0.00	2.53	2.53	97.47
Natural Gas Distribution (NAICS 2212)	0.00	3.57	0.00	0.00	7.14	10.71	89.29

Sources and Notes: See Table 3.11.

Table 3.15A. Detailed VOB and SDVOB Availability Percentages—Commodities (All Contracts) (Dollars Awarded)

Detailed Industry Group	Veteran	Service-Disabled Veteran
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)	0.94	0.91
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)	0.11	0.00
Utility System Construction (NAICS 2371)	0.00	0.00
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)	8.29	0.00
Automobile Dealers (NAICS 4411)	9.57	1.91
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)	6.74	0.14
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)	10.61	1.17
Nonresidential Building Construction (NAICS 2362)	8.87	2.04
Communications Equipment Manufacturing (NAICS 3342)	22.22	8.04
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)	0.00	0.00
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)	0.38	0.00
Building Equipment Contractors (NAICS 2382)	5.23	1.86
Management, Scientific, and Technical Consulting Services (NAICS 5416)	10.26	5.82
Computer Systems Design and Related Services (NAICS 5415)	3.05	0.80
Computer and Peripheral Equipment Manufacturing (NAICS 3341)	3.37	0.00
Electrical Equipment Manufacturing (NAICS 3353)	0.00	0.00
Highway, Street, and Bridge Construction (NAICS 2373)	9.10	1.36
Petroleum and Coal Products Manufacturing (NAICS 3241)	0.00	0.00
Plastics Product Manufacturing (NAICS 3261)	0.00	0.00
Sawmills and Wood Preservation (NAICS 3211)	0.00	0.00
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)	5.58	5.48
Lime and Gypsum Product Manufacturing (NAICS 3274)	0.00	0.00
Architectural, Engineering, and Related Services (NAICS 5413)	8.68	0.80
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)	0.00	0.00
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)	0.00	0.00
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)	0.23	0.00
Software Publishers (NAICS 5112)	6.36	3.47
Paper and Paper Product Merchant Wholesalers (NAICS 4241)	0.00	0.00
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	10.05	0.00
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)	3.34	0.00
Other Telecommunications (NAICS 5179)	2.08	2.08
Direct Selling Establishments (NAICS 4543)	6.93	0.00
Basic Chemical Manufacturing (NAICS 3251)	0.00	0.00
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)	1.68	0.00
Business Support Services (NAICS 5614)	0.00	0.00
Other Chemical Product and Preparation Manufacturing (NAICS 3259)	0.00	0.00

M/WBE Availability in the City of Austin's Market Area

Detailed Industry Group	Veteran	Service-Disabled Veteran
Aerospace Product and Parts Manufacturing (NAICS 3364)	8.28	0.00
Other General Purpose Machinery Manufacturing (NAICS 3339)	0.00	0.00
Clothing Stores (NAICS 4481)	7.24	3.60
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)	4.54	0.00
Other Financial Investment Activities (NAICS 5239)	19.59	19.59
Automotive Repair and Maintenance (NAICS 8111)	1.91	0.00
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)	20.09	8.75
Other Electrical Equipment and Component Manufacturing (NAICS 3359)	0.61	0.00
Other Specialty Trade Contractors (NAICS 2389)	7.13	0.44
Electronic Shopping and Mail-Order Houses (NAICS 4541)	0.00	0.00
Cement and Concrete Product Manufacturing (NAICS 3273)	0.00	0.00
Building Material and Supplies Dealers (NAICS 4441)	12.83	1.34
Medical Equipment and Supplies Manufacturing (NAICS 3391)	1.53	0.00
Residential Building Construction (NAICS 2361)	0.37	0.04
Individual and Family Services (NAICS 6241)	1.79	0.00
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)	1.47	0.00
General Freight Trucking (NAICS 4841)	7.95	3.41
Waste Treatment and Disposal (NAICS 5622)	6.25	0.00
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)	5.88	0.00
Pharmaceutical and Medicine Manufacturing (NAICS 3254)	0.00	0.00
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	0.00	0.00
Other Miscellaneous Store Retailers (NAICS 4539)	0.98	0.11
Rubber Product Manufacturing (NAICS 3262)	0.00	0.00
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)	25.00	0.00
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)	0.00	0.00
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)	7.07	3.51
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)	0.00	0.00
Electronics and Appliance Stores (NAICS 4431)	0.72	0.00
Other Fabricated Metal Product Manufacturing (NAICS 3329)	0.00	0.00
Personal and Household Goods Repair and Maintenance (NAICS 8114)	26.82	0.40
Other Support Services (NAICS 5619)	0.15	0.07
Other Miscellaneous Manufacturing (NAICS 3399)	0.00	0.00
Electric Power Generation, Transmission and Distribution (NAICS 2211)	2.00	0.00
Remediation and Other Waste Management Services (NAICS 5629)	0.00	0.00
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)	0.00	0.00
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)	0.00	0.00
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)	16.43	3.99
Metalworking Machinery Manufacturing (NAICS 3335)	0.00	0.00
Shoe Stores (NAICS 4482)	0.75	0.00
Steel Product Manufacturing from Purchased Steel (NAICS 3312)	0.00	0.00

Detailed Industry Group	Veteran	Service-Disabled Veteran
Electric Lighting Equipment Manufacturing (NAICS 3351)	0.00	0.00
Depository Credit Intermediation (NAICS 5221)	0.00	0.00
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)	0.00	0.00
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)	6.12	0.00
Motor Vehicle Manufacturing (NAICS 3361)	0.00	0.00
Other Professional, Scientific, and Technical Services (NAICS 5419)	0.43	0.32
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)	10.06	1.68
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)	4.40	0.00
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)	0.00	0.00
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)	5.67	0.00
Legal Services (NAICS 5411)	0.00	0.00
Forging and Stamping (NAICS 3321)	0.00	0.00
Services to Buildings and Dwellings (NAICS 5617)	5.46	0.32
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)	19.45	0.00
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)	0.00	0.00
Ship and Boat Building (NAICS 3366)	0.00	0.00
Book Stores and News Dealers (NAICS 4512)	0.88	0.00
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)	0.00	0.00
Lessors of Real Estate (NAICS 5311)	0.00	0.00
Architectural and Structural Metals Manufacturing (NAICS 3323)	14.29	0.00
Support Activities for Air Transportation (NAICS 4881)	13.16	6.58
Other Motor Vehicle Dealers (NAICS 4412)	12.08	0.00
Specialized Design Services (NAICS 5414)	0.00	0.00
Building Finishing Contractors (NAICS 2383)	2.87	2.87
Support Activities for Mining (NAICS 2131)	24.37	0.00
Natural Gas Distribution (NAICS 2212)	7.14	0.00

Sources and Notes: See Table 3.11.

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IV. Market-Based Disparities in Business Formation and Business Owner Earnings

A. Introduction

In this chapter, we examine disparities in business formation and earnings in the private sector, where contracting activities are generally *not* subject to M/WBE or other affirmative action requirements.⁷⁰ Statistical examination of disparities in the private sector of the relevant geographic market area is important for several reasons. First, to the extent that discriminatory practices by contractors, suppliers, insurers, lenders, customers, and others limit the ability of M/WBEs to compete, those practices will impact the larger private sector as well as the public sector. Second, examining the utilization of M/WBEs in the private sector provides an indicator of the extent to which M/WBEs are used in the absence of race- and gender-conscious efforts, since few firms in the private sector make such efforts. Third, the Supreme Court in *Croson* and other courts acknowledged that state and local governments have a constitutional duty not to contribute to the perpetuation of discrimination in the private sector of their relevant geographic and product markets.

After years of comparative neglect, research on the economics of entrepreneurship and self-employment expanded significantly beginning in the mid-1980s.⁷¹ As a result, there now exists significant agreement on the microeconomic correlates of self-employment.⁷² In the U.S., it is known that self-employment rises with age, is higher among men than women, and higher among non-minorities than minorities. The least educated have the highest probability of being self-employed. However, there is evidence in the U.S. that the most highly educated also have a relatively high probability of self-employment. On average, however, increases in educational attainment are generally found to lead to increases in the probability of being self-employed. A higher number of children in the family increases the likelihood of self-employment, at least for men. Workers in agriculture and construction are also especially relatively more likely to be self-employed.

⁷⁰ Affirmative action requirements for VOBs and SDVOBs are still relatively rare. In this Chapter, we have added controls to all of the regression analyses, discussed below, in order to examine the current market status of VOBs and SDVOBs in addition to that of M/WBEs.

⁷¹ Microeconomic work includes Fuchs (1982), Borjas and Bronars (1989), Evans and Jovanovic (1989), Evans and Leighton (1989), Fairlie and Meyer (1996, 1998), Reardon (1998), Fairlie (1999), Wainwright (2000), Blanchflower and Wainwright (2005), and Blanchflower (2009) for the United States; Rees and Shah (1986), Pickles and O'Farrell (1987), Blanchflower and Oswald (1990, 1998), Meager (1992), Taylor (1996), Robson (1998a, 1998b), and Blanchflower and Shadforth (2007) for the UK; DeWit and van Winden (1990) for the Netherlands; Alba-Ramirez (1994) for Spain; Bernhardt (1994), Schuetze (1998), Arai (1997), Lentz and Laband (1990), and Kuhn and Schuetze (1998) for Canada; LaFerrere and McEntee (1995) for France; Blanchflower and Meyer (1994) and Kidd (1993) for Australia; and Foti and Vivarelli (1994) for Italy. There are also several theoretical papers including Kihlstrom and Laffont (1979), Kanbur (1990), Holmes and Schmitz (1990), Coate and Tennyson (1992), and Cagetti and DeNardi (2006), plus a few papers that draw comparisons across countries, *e.g.*, Schuetze (1998) for Canada and the U.S., Blanchflower and Meyer (1994) for Australia and the U.S., Alba-Ramirez (1994) for Spain and the United States, and Acs and Evans (1994), Blanchflower (2000), Blanchflower, Oswald, and Stutzer (2001), and Blanchflower and Oswald (2008) for many countries.

⁷² Parker (2004) and Aronson (1991) provide good overviews.

There has been relatively less work on how institutional factors influence self-employment. Such work that has been conducted includes examining the role of minimum wage legislation (Blau, 1987), immigration (Fairlie and Meyer, 1998 and 2003; Olson, Zuiker and Montalto, 2000; Mora and Dávila, 2006; Robles and Cordero-Guzmán, 2007),⁷³ immigration policy (Borjas and Bronars, 1989), and retirement policies (Quinn, 1980). Studies by Long (1982), Blau (1987), and Schuetze (1998), have considered the role of taxes.⁷⁴ A number of other studies have also considered the cyclical aspects of self-employment and in particular how movements of self-employment are correlated with movements in unemployment. Meager (1992) provides a useful summary of much of this work.⁷⁵

Blanchflower, Oswald and Stutzer (2001) found that there is a strikingly large latent desire to own a business. There exists frustrated entrepreneurship on a huge scale in the U.S. and other Organization for Economic Co-operation and Development (OECD) countries.⁷⁶ In the U.S., 7 out of 10 people say they would prefer to be self-employed. This compares to an actual proportion of self-employed people in 2001 of 7.3 percent of the civilian labor force, which also shows that the proportion of the labor force that is self-employed has declined steadily since 1990 following a small increase in the rate from 1980 to 1990. This raises an important question. Why do so few individuals in the U.S. and OECD countries manage to translate their preferences

⁷³ Fairlie and Meyer (1998) found that immigration had no statistically significant impact at all on African American self-employment. In a subsequent paper, Fairlie and Meyer (2003) found that self-employed immigrants did displace self-employed native non-African Americans. They found that immigration has a large negative effect on the probability of self-employment among native non-African Americans, although, surprisingly, they found that immigrants increase native self-employment earnings.

⁷⁴ In an interesting study pooling individual level data for the U.S. and Canada from the Current Population Survey and the Survey of Consumer Finances, respectively, Schuetze (1998) finds that increases in income taxes have large and positive effects on the male self-employment rate. He found that a 30 percent increase in taxes generated a rise of 0.9 to 2.0 percentage points in the male self-employment rate in Canada compared with a rise of 0.8 to 1.4 percentage points in the U.S. over 1994 levels.

⁷⁵ Evans and Leighton (1989) found that nonminority men who are unemployed are nearly twice as likely as wage workers to enter self-employment. Bogenhold and Staber (1991) also find evidence that unemployment and self-employment are positively correlated. Blanchflower and Oswald (1990) found a strong negative relationship between regional unemployment and self-employment for the period 1983-1989 in the U.K. using a pooled cross-section time-series data set. Blanchflower and Oswald (1998) confirmed this result, finding that the log of the county unemployment rate entered negatively in a cross-section self-employment model for young people age 23 in 1981 and for the same people aged 33 in 1991. Taylor (1996) confirmed this result using data from the British Household Panel Study of 1991, showing that the probability of being self-employed rises when expected self-employment earnings increase relative to employee earnings, *i.e.*, when unemployment is low. Acs and Evans (1994) found evidence from an analysis of a panel of countries that the unemployment rate entered negatively in a fixed effect and random effects formulation. However, Schuetze (1998) found that for the U.S. and Canada the elasticity of the male self-employment rate with respect to the unemployment rate was considerably smaller than found for the effect from taxes discussed above. The elasticity of self-employment associated with the unemployment rate is about 0.1 in both countries using 1994 figures. A decrease of 5 percentage points in the unemployment rate in the U.S. (about the same decline occurred from 1983-1989) leads to about a 1 percentage point decrease in self-employment. Blanchflower (2000) found that there is generally a negative relationship between the self-employment rate and the unemployment rate. It does seem then that there is some disagreement in the literature on whether high unemployment acts to discourage self-employment because of the lack of available opportunities or encourage it because of the lack of viable alternatives.

⁷⁶ The OECD is an international organization of those developed countries that accept the principles of representative democracy and a free market economy. There are currently 30 full members.

into action? Lack of start-up capital is one likely explanation. This factor is commonly cited by small-business managers themselves (Blanchflower and Oswald, 1998). There is also econometric evidence that confirms this barrier. Holding other influences constant, people who inherit cash, who win the lottery, or who have large family assets, are all more likely both to set up and sustain a lasting small business. By contrast, childhood personality test-scores turn out to have almost no predictive power about which persons will be running their own businesses as adults (Blanchflower and Oswald, 1998).

One primary impediment to entrepreneurship among minorities is lack of capital. In work based on U.S. micro data at the level of the individual, Evans and Leighton (1989), and Evans and Jovanovic (1989), have argued formally that entrepreneurs face liquidity constraints. The authors use the National Longitudinal Survey of Young Men for 1966-1981, and the Current Population Surveys for 1968-1987. The key test shows that, all else remaining equal, people with greater family assets are more likely to switch to self-employment from employment. This asset variable enters econometric equations significantly and with a quadratic form. Although Evans and his collaborators draw the conclusion that capital and liquidity constraints bind, this claim is open to the objection that other interpretations of their correlation are feasible. One possibility, for example, is that inherently acquisitive individuals both start their own businesses and forego leisure to build up family assets. In this case, there would be a correlation between family assets and movement into self-employment even if capital constraints did not exist. A second possibility is that the correlation between family assets and the movement to self-employment arises because children tend to inherit family firms. Blanchflower and Oswald (1998), however, find that the probability of self-employment depends positively upon whether the individual ever received an inheritance or gift.⁷⁷ Moreover, when directly questioned in interview surveys, potential entrepreneurs say that raising capital is their principal problem. Work by Holtz-Eakin, Joulfaian and Harvey (1994a, 1994b) drew similar conclusions using different methods on U.S. data, examining flows into and out of self-employment and finding that inheritances both raise entry and slow exit. In contrast, Hurst and Lusardi (2004), citing evidence from the U.S. *Panel Study of Income Dynamics*, claim to show that wealth is not a significant determinant of entry into self-employment. In response, however, Fairlie and Krashinsky (2006) have demonstrated that when the sample is split into two segments—those who enter self-employment after job loss and those who do not—the strong correlation between assets and rate of entry business formation is evident in both segments.

The work of Black, et al. (1996) for the United Kingdom discovers an apparently powerful role for house prices (through its impact on equity withdrawal) in affecting the supply of small new firms. Cowling and Mitchell (1997) find a similar result. Again, these are both suggestive of capital constraints. Finally, Lindh and Ohlsson (1996) adopt the Blanchflower-Oswald procedure and provide complementary evidence for Sweden. Bernhardt (1994), in a study for Canada using data from the 1981 Social Change in Canada Project, also found evidence that capital constraints appear to bind. Using the 1991 French Household Survey of Financial Assets, LaFerrere and McEntee (1995) examined the determinants of self-employment using data on intergenerational transfers of wealth, education, informal human capital, and a range of demographic variables.

⁷⁷ This emerges from British data, the National Child Development Study; a birth cohort of children born in March 1958 who have been followed for the whole of their lives.

They also find evidence of the importance played by the family in the decision to enter self-employment. Intergenerational transfers of wealth, familial transfers of human capital, and the structure of the family, were found to be determining factors in the decision to move from wage work into entrepreneurship. Broussard, et al. (2003) found that the self-employed have between 0.2 and 0.4 more children compared to the non-self-employed. The authors argue that having more children can increase the likelihood that an inside family member will be a good match at running the business. One might also think that the existence of family businesses, which are particularly prevalent in construction and in agriculture, is a further way to overcome the existence of capital constraints. Transfers of firms within families will help to preserve the status quo and will work against the interests of African Americans, in particular, who do not have as strong a history of business ownership as indigenous non-minorities. Analogously, Hout and Rosen (2000) and Fairlie and Robb (2007a) found that the offspring of self-employed parents are more likely than others to become self-employed and argued that the historically low rates of self-employment among African Americans and Latinos may contribute to their low contemporary rates. Fairlie and Robb (2007b), using data from the U.S. *Characteristics of Business Owners Survey*, and Dunn and Holtz-Eakin (2000), using data from the U.S. *National Longitudinal Surveys*, show that the transmission of positive effects of family on self-employment operates through two channels, intergenerational transmission of entrepreneurial preferences and wealth, and the acquisition of general and specific human capital.

A continuing puzzle in the literature has been why, nationally, the self-employment rate of African American males is one-third of that of nonminority males and has remained roughly constant since 1910. Fairlie and Meyer (2000) rule out a number of explanations for the difference. They found that trends in demographic factors, including the Great Migration and the racial convergence in education levels, “did not have large effects on the trend in the racial gap in self-employment” (p. 662). They also found that an initial lack of business experience “cannot explain the current low levels of black self-employment.” Further, they found that “the lack of traditions in business enterprise among blacks that resulted from slavery cannot explain a substantial part of the current racial gap in self-employment” (p. 664).

Fairlie (1999) and Wainwright (2000) have shown that a considerable part of the explanation of the differences between the African American and nonminority self-employment rate can be attributed to discrimination. Using the 5 percent Public Use Microdata Sample data (“PUMS”) from the 1990 Census, Wainwright (2000) demonstrated that these disparities tend to persist even when factors such as geography, industry, occupation, age, education and assets are held constant.⁷⁸

⁷⁸ In Wainwright (2000), the author conducted a series of regression analyses, similar to those reported in Chapter IV, that examined racial differences among males in business formation rates and business owner earnings while holding a large set of control factors constant. Separate regressions were conducted for each of the nine Census geographic divisions. In addition to race, the following factors were controlled for: educational attainment, age, marital status, non-mover status, number of workers in the family, number of children, immigrant status, years in the U.S., English language proficiency, work-limiting disability, veteran status, years of military services, interest and dividend income, usual weeks worked per year, and usual hours worked per week, industry, and occupation. Additionally, a set of local labor market variables was included for each Census division, including the unemployment rate, population size, population growth rate, the government employment rate, and per capita income. The results, in general, showed large and statistically significant disparities in both sets of regressions

Bates (1989) finds strong supporting evidence that racial differences in levels of financial capital have significant effects upon racial patterns in business failure rates. Fairlie (1999, 2006) demonstrates, for example, that the African American exit rate from self-employment is twice as high as that of non-minorities. An example will help to make the point. Two baths are being filled with water. In the first scenario, both have the plug in. Water flows into bath A at the same rate as it does into bath B—that is, the inflow rate is the same. When we return after ten minutes the amount of water (the stock) will be the same in the two baths as the inflow rates were the same. In the second scenario, we take out the plugs and allow for the possibility that the outflow rates from the two baths are different. Bath A (the African American firms) has a much larger drain and hence the water flows out more quickly than it does from bath B (the nonminority firms). When we return after 10 minutes, even though the inflow rates are the same there is much less water in bath A than there is in bath B. A lower exit rate for nonminority-owned firms than is found for minority-owned firms is perfectly consistent with the observed fact that minority-owned firms are younger and smaller than nonminority-owned firms. The extent to which that will be true is a function of the relative sizes of the inflow and the outflow rates.

B. Race and Gender Disparities in Wage and Salary Earnings

In this section, we examine earnings to determine whether minority and female entrepreneurs earn less from their businesses than do their nonminority male counterparts. Other things equal, if minority and female business owners as a group cannot achieve comparable earnings from their businesses as similarly situated nonminorities because of discrimination, then failure rates for M/WBEs will be higher and M/WBE formation rates will be lower than would be observed in a race- and gender-neutral market area. Both phenomena would contribute directly to lower levels of minority and female business ownership.

Below, we first examine earnings disparities among wage and salary employees, that is, non-business owners. It is helpful to examine this segment of the labor force since a key source of new entrepreneurs in any given industry is the pool of experienced wage and salary workers in similar or related industries (Blanchflower 2000). Therefore, employment discrimination that adversely impacts the ability of minorities or women to succeed in the labor force directly shrinks the available pool of potential M/WBEs. In almost every instance examined, a statistically significant adverse impact on wage and salary earnings is observed—in both the economy at large, in the construction and construction-related professional services sector, and in the goods and services sector.⁷⁹

We then turn to an examination of differences in earnings among the self-employed, that is, among business owners. Here too, among the pool of minorities and women who have formed

for all minority groups examined. The findings were strongest for African Americans, followed by Native Americans and Hispanics. Large disparities were documented for Asians as well in many instances.

⁷⁹ There is a substantial body of evidence that discriminatory constraints in the capital market prevent minority-owned businesses from obtaining business loans. Furthermore, even when they are able to obtain them, there is evidence that these loans are not obtained on equal terms: minority-owned firms have to pay higher interest rates, other things being equal. This is another form of discrimination with an obvious and direct impact on the ability of racial minorities to form businesses and to expand or grow previously formed businesses. See Chapter V, *infra*.

businesses despite discrimination in both employment opportunities and business opportunities, statistically significant adverse impacts are observed in the vast majority of cases in construction and construction-related professional services (hereafter, “construction”), and other sectors of the economy.

In the remainder of this chapter, we discuss the methods and data we employed and present the specific findings.

1. Methods

We used the statistical technique of linear regression analysis to estimate the effect of each of a set of observable characteristics, such as education and age, on an outcome variable of interest. In this case, the outcome variable of interest is earnings and we used regression to compare earnings among individuals in similar geographic and product markets at similar points in time and with similar years of education and potential labor market experience and see if any adverse race or gender differences remain. In a discrimination free market area, one would not expect to observe significant differences in earnings by race or gender among such similarly situated observations.

Regression also allows us to narrowly tailor our statistical tests to the City of Austin’s relevant geographic market, and assess whether disparities in that market are statistically significantly different from those observed elsewhere in the nation. Starting from an economy-wide data set, we first estimated the basic model of earnings differences just described and also included an indicator variable for the City of Austin Market Area (AUSMA), which is comprised of the Austin-Round Rock, TX Metropolitan Statistical Area. This variable estimates the differential effect of location in the AUSMA relevant to the rest of the country. This model appears as Specification 1 in Tables 4.1 through 4.6. Next, we estimated Specification 2, which is the same model as Specification 1 but with the addition of indicator variables that interact race and gender with the AUSMA indicator. These variables estimate the differential effect of location in the AUSMA *and* membership in the given race or gender group. Specification 3 represents our ultimate specification, which includes all of the variables from the basic model as well as any of the interaction terms from Specification 2 that were statistically significant.⁸⁰

Any negative and statistically significant differences by race or gender that remain in Specification 3 after holding all of these other factors constant—time, age, education, geography, and industry—are consistent with what would be observed in a market suffering from business-related discrimination.⁸¹

⁸⁰ If none of these terms is significant, then Specification 3 reduces to Specification 1.

⁸¹ Typically, a given test statistic is considered to be statistically significant if there is a reasonably low probability that the value of the statistic is due to random chance alone. Unless otherwise indicated, in this and subsequent chapters, we employ three levels of statistical significance, corresponding to 10 percent, 5 percent, and 1 percent probabilities that results were the result of random chance.

2. Data

The analyses undertaken in this Study require individual-level data (*i.e.*, “microdata”) with relevant information on business ownership status and other key socioeconomic characteristics. The data source used is the American Community Survey (ACS) Public Use Microdata Sample (PUMS) for 2009–2013. The Census Bureau’s ACS is an ongoing survey covering the same type of information collected in the decennial census. The ACS is sent to approximately 3 million addresses annually, including housing units in all counties in the 50 states and the District of Columbia. The PUMS file from the ACS contains records for a subsample of the full ACS. The data used here are the multi-year estimates combining the 2009 through 2013 ACS PUMS records. The combined file contains over six million person-level records. Released in early 2013, the 2009-2013 ACS PUMS provides the full range of population and housing information collected in the annual ACS and in the decennial census. Business ownership status is identified in the ACS PUMS through the “class of worker” variable, which distinguishes the unincorporated and incorporated self-employed from others in the labor force. The presence of the class of worker variable allows us to construct a detailed cross-sectional sample of individual business owners and their associated earnings.

3. Findings: Race and Gender Disparities in Wage and Salary Earnings

Tables 4.1, 4.2 and 4.3 report results from our regression analyses of annual earnings among wage and salary workers. Table 4.1 focuses on the economy as a whole, Table 4.2 on the construction sector, and Table 4.3 on the goods and services sector. The numbers shown in each table indicate the percentage difference in that sector between the average annual wages of a given race/gender group and comparable nonminority males.

a. Specification 1 - the Basic Model

For example, in Table 4.1 Specification 1, the estimated percentage difference in average annual wages between African Americans (both genders) and nonminority males in 2009–2013 was -38.3 percent. That is, average annual wages among African Americans were 38.3 percent lower than for nonminority males who were otherwise similar in terms of geographic location, industry, age, and education. The number in parentheses below each percentage difference is the t-statistic, which indicates whether the estimated percentage difference is statistically significant or not. In Tables 4.1 through 4.6, a t-statistic of 1.99 or larger indicates statistical significance at a 95 percent confidence level or better, while a t-statistic of 1.64 or larger indicates statistical significance at a 90 percent confidence level or better.⁸² In the example just used, the t-statistic of 297.01 indicates that the result is statistically significant.

Specification 1 in Table 4.1 shows adverse and statistically significant wage disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting in multiple race categories and nonminority women, consistent with the presence of discrimination in these markets. Observed disparities are large as well, ranging from -20.0 percent for Asians/Pacific Islanders to -38.3 percent for African Americans.

⁸² From a two-tailed test.

Specification 1 in Table 4.2 shows similar results when the basic analysis is restricted to the construction sector. In this sector, large, adverse, and statistically significant wage disparities are once again observed for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting in multiple race categories and nonminority women, consistent with the presence of discrimination in these markets. Observed disparities in this sector are large as well, ranging from 14.1 percent for Asians/Pacific Islanders to -37.0 percent for African Americans.

Similarly, Specification 1 in Table 4.3 for the goods and services sector also shows large, adverse, and statistically significant wage disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting in multiple race categories and nonminority women, consistent with the presence of discrimination in these markets. Observed disparities are large in this sector also, ranging from -20.5 percent for Asians/Pacific Islanders to -38.4 percent for African Americans.

A comparison of Tables 4.1 and 4.2 shows that for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races, and nonminority females, the disparities in the construction sector are slightly smaller than those observed in the economy as a whole. A comparison of Tables 4.1 and 4.3 shows that for each of these groups, the disparities in the goods and services sector are slightly larger than those observed in the economy as a whole.

b. Specifications 2 and 3 - the Full Model Including Austin-Specific Interaction Terms

Next, we turn to Specifications 2 and 3 in Tables 4.1 through 4.3. In each of these Tables, Specification 2 is the basic regression model with a set of interaction terms added, designed to test whether minorities and women in the AUSMA differ significantly from those elsewhere in the U.S. economy. Specification 2 in Table 4.1 shows a -38.2 percent wage difference which estimates the direct effect of being African American in 2009–2013, as well as a statistically significant 10.0 percent wage decrement that captures the indirect effect of residing in the AUSMA and being African American. That is, wages for African Americans in the AUSMA, on average, were 10.0 percent lower than for African Americans in the nation as a whole and 48.2 percent lower (-38.2 percent minus 10.0 percent) than for nonminority males in the AUSMA.

Specification 3 simply repeats Specification 2, dropping any AUSMA interactions that are not statistically significant. In Table 4.1, for example, interaction terms were included in the final specification only for African Americans. The net result of Specification 3 in Table 4.1 is evidence of large, adverse, and statistically significant wage disparities for all minority groups and for nonminority women consistent with the presence of discrimination in these markets.

The same is true for the construction sector (Table 4.2) as well as for the goods and services sector (Table 4.3). In the construction sector, the wage decrement for African Americans associated with living in the AUSMA is 22.5 percent. This result is statistically significant and indicates that wages for African Americans in construction in the AUSMA, on average, were 22.5 percent lower than for African Americans in the nation as a whole and 59.5 percent lower (-37.0 percent minus 22.5 percent) than for nonminority males in the AUSMA. For Hispanics, the wage decrement associated with the construction sector in Austin was also large— 6.6 percent—

indicating that wages for Hispanics in construction in the AUSMA, on average, were 6.6 percent lower than for Hispanics in the nation as a whole and 30.0 percent lower (-23.4 percent minus 6.6 percent) than for nonminority males in the AUSMA.⁸³ A statistically significant wage decrement is observed in the goods and services sector for African Americans as well. This result indicates that wages for African Americans in goods and services in the AUSMA, on average, were 10.2 percent lower than for African Americans in the nation as a whole and 48.6 percent lower (-38.4 percent minus 22.5 percent) than for nonminority males in the AUSMA.

4. Findings: Disparities in Wage and Salary Earnings for Veterans and Service-Disabled Veterans

In addition to showing wage and salary earnings disparities by race and gender, Tables 4.1, 4.2 and 4.3 also examine such disparities among veterans and service-disabled veterans compared to non-veterans.

Specification 1 in Table 4.1 shows adverse and statistically significant wage disparities for veterans and service-disabled veterans. For veterans, the difference is -2.5 percent and for service-disabled veterans it is -8.2 percent.⁸⁴ Specification 1 in Table 4.2 shows results when the basic analysis is restricted to the construction sector. In this sector, adverse and statistically significant wage disparities are once again observed for veterans, at -2.7 percent, but no wage decrement is observed for service-disabled veterans in this sector. Specification 1 in Table 4.3 for the goods and services sector also shows adverse and statistically significant wage disparities for veterans and service-disabled veterans. For veterans, the difference is -2.5 percent and for service-disabled veterans, -9.0 percent.

Turning to Specifications 2 and 3, the interaction term between the Austin Market area and service-disabled veteran status is statistically significant in the economy as a whole and also in the goods and services sector. Therefore, the final estimates of wage and salary earnings disparities for veterans in all three tables are the same as in Specification 1. For service-disabled veterans, the final difference is -5.9 percent in the economy as a whole and -6.6 percent in the goods and services sector.

a. Conclusions

Tables 4.1 through 4.3 demonstrate that minorities and women earn substantially and significantly less from their labor than do their similarly situated nonminority male counterparts—in the nation as a whole and in the City of Austin Market Area in particular. Such disparities are consistent with the presence of discrimination in the labor force that, in addition to

⁸³ Wage decrements in construction in the AUSMA were also observed for Asians/Pacific Islanders (-13.2%), nonminority women (-4.1%), persons reporting multiple races (-2.0%), and veterans (-1.1%). However, these differences were not statistically significant.

⁸⁴ Since service-disabled veterans are also veterans, the veteran and service-disabled veteran coefficients must be added together in order to arrive at the appropriate estimate for service-disabled veterans. So, for example, in Specification 1 of Table 4.1, the coefficient on veterans is -2.5 percent and for service-disabled veterans it is -5.7 percent. Summing these two values leads to a total wage disparity for service-disabled veterans of $[-2.5\% + -5.7\%] = -8.2\text{ percent}$.

its direct effect on workers, reduces the future availability of M/WBEs by stifling opportunities for minorities and women to progress through precisely those internal labor markets and occupational hierarchies that are most likely to lead to acquiring the skills, experience and contacts necessary to take advantage of entrepreneurial opportunities.⁸⁵ They also demonstrate that discrimination results in less opportunity for minorities and women to accumulate and save business start-up capital through their work as employees. In Austin, the disparities are particularly acute in the construction sector, and reflect more than just “societal discrimination” because they indicate a nexus between discrimination in the job market and reduced entrepreneurial opportunities for minorities and women. Other things equal, these reduced entrepreneurial opportunities, in turn, lead to lower M/WBE availability levels than would be expected if the market area were race- and gender-neutral.

Adverse disparities were observed for VOBs in the economy as a whole, in the construction sector, and in the goods and services sector, and for SDVOBs in the economy as a whole and in the goods and services sector. These disparities, however, were substantially smaller than those observed for M/WBEs overall.

⁸⁵ See, e.g., Ruetschlin and Asante-Muhammad (2015), Hamilton, et al. (2011), Pitts (2007).

Table 4.1. Annual Wage Earnings Regressions, All Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.383 (297.01)	-0.382 (296.19)	-0.382 (296.28)
Hispanic	-0.286 (228.56)	-0.286 (227.37)	-0.287 (228.58)
Asian/Pacific Islander	-0.200 (111.15)	-0.200 (110.89)	-0.200 (111.16)
Native American	-0.361 (80.63)	-0.361 (80.54)	-0.361 (80.63)
Two or more races	-0.300 (106.93)	-0.301 (106.63)	-0.300 (106.93)
Nonminority Female	-0.329 (371.26)	-0.329 (370.44)	-0.329 (371.26)
Veteran	-0.025 (13.13)	-0.026 (13.12)	-0.025 (13.12)
Service-disabled veteran	-0.057 (11.69)	-0.057 (11.67)	-0.057 (11.69)
Age	0.197 (811.53)	0.197 (811.52)	0.197 (811.53)
Age ²	-0.002 (698.92)	-0.002 (698.91)	-0.002 (698.92)
AUSMA	0.064 (11.29)	0.065 (6.58)	0.070 (12.00)
AUSMA*African American		-0.100 (4.17)	-0.104 (4.52)
AUSMA*Hispanic		-0.015 (1.10)	n/a
AUSMA*Asian/Pacific Islander		0.030 (1.20)	n/a
AUSMA*Native American		-0.036 (0.29)	n/a
AUSMA*Two or more races		0.006 (0.14)	n/a
AUSMA*Nonminority female		0.013 (0.49)	n/a
AUSMA*Veteran		0.009 (0.15)	n/a
AUSMA*Service-disabled veteran		0.023 (1.65)	0.023 (1.65)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	5362429	5362429	5362429
Adj. R ²	.3818	.3818	.3818

Source: NERA calculations from the 2009-2013 ACS Public Use Microdata Sample.

Notes: (1) See above, section B.3.(a)-(b) for a description of Specifications 1 through 3; (2) Universe is all private sector wage and salary workers between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number is the percentage difference in annual wages between a given group and nonminority men; (4) Number in parentheses is the absolute value of the associated t-statistic. Using a two-tailed test, t-statistics greater than 1.67 (1.99) (2.64) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) "AUSMA" is shorthand for "City of Austin Market Area," which includes the Austin-Round Rock Metropolitan Statistical Area; (7) "n/a" in Specification 3 means that the category was not included in the regression because it was not statistically significant in Specification 2, as described above in section B.3.b; (8) The "Yes" values next to the "Education," "Geography" and "Industry" rows indicate that control variables were included in the regression specification for these factors.

Table 4.2. Annual Wage Earnings Regressions, Construction and Related Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.370 (62.39)	-0.370 (62.19)	-0.370 (62.38)
Hispanic	-0.235 (58.12)	-0.234 (57.63)	-0.234 (57.67)
Asian/Pacific Islander	-0.141 (15.35)	-0.140 (15.28)	-0.140 (15.33)
Native American	-0.346 (25.64)	-0.345 (25.58)	-0.346 (25.63)
Two or more races	-0.234 (21.08)	-0.233 (20.97)	-0.234 (21.07)
Nonminority Female	-0.316 (76.85)	-0.316 (76.54)	-0.316 (76.86)
Veteran	-0.027 (4.71)	-0.026 (4.63)	-0.027 (4.71)
Service-disabled veteran	0.003 (0.24)	0.003 (0.17)	0.004 (0.24)
Age	0.144 (156.76)	0.144 (156.75)	0.144 (156.75)
Age ²	-0.001 (134.55)	-0.001 (134.54)	-0.001 (134.55)
AUSMA	-0.029 (1.63)	0.022 (0.79)	-0.000 (0.01)
AUSMA*African American		-0.225 (1.84)	-0.225 (1.84)
AUSMA*Hispanic		-0.085 (2.35)	-0.066 (1.95)
AUSMA*Asian/Pacific Islander		-0.027 (0.18)	n/a
AUSMA*Native American		-0.285 (0.72)	n/a
AUSMA*Two or more races		-0.180 (1.00)	n/a
AUSMA*Nonminority female		-0.061 (0.83)	n/a
AUSMA*Veteran		0.227 (1.01)	n/a
AUSMA*Service-disabled veteran		-0.039 (0.68)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	410822	410822	410822
Adj. R ²	.2020	.2020	.2020

Source and Notes: See Table 4.1.

Table 4.3. Annual Wage Earnings Regressions, Goods and Services Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.384 (289.62)	-0.384 (288.83)	-0.384 (288.91)
Hispanic	-0.293 (222.10)	-0.293 (220.99)	-0.293 (222.12)
Asian/Pacific Islander	-0.205 (111.29)	-0.205 (111.03)	-0.205 (111.29)
Native American	-0.362 (76.42)	-0.362 (76.34)	-0.362 (76.42)
Two or more races	-0.305 (105.08)	-0.305 (104.79)	-0.305 (105.08)
Nonminority Female	-0.330 (360.42)	-0.330 (359.63)	-0.330 (360.42)
Veteran	-0.025 (11.99)	-0.025 (12.01)	-0.025 (11.98)
Service-disabled veteran	-0.065 (12.58)	-0.064 (12.53)	-0.065 (12.58)
Age	0.200 (794.87)	0.200 (794.86)	0.200 (794.87)
Age ²	-0.002 (684.30)	-0.002 (684.29)	-0.002 (684.30)
AUSMA	0.074 (12.23)	0.071 (6.75)	0.080 (12.90)
AUSMA*African American		-0.097 (3.93)	-0.102 (4.38)
AUSMA*Hispanic		-0.011 (0.74)	n/a
AUSMA*Asian/Pacific Islander		0.034 (1.31)	n/a
AUSMA*Native American		-0.017 (0.13)	n/a
AUSMA*Two or more races		0.017 (0.38)	n/a
AUSMA*Nonminority female		0.023 (0.86)	n/a
AUSMA*Veteran		-0.009 (0.14)	n/a
AUSMA*Service-disabled veteran		0.024 (1.70)	0.024 (1.70)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	4951607	4951607	4951607
Adj. R ²	.3918	.3918	.3918

Source and Notes: See Table 4.1.

5. Findings: Race and Gender Disparities in Business Owner Earnings

The patterns of discrimination that affect minority and female wage earners affect minority and female entrepreneurs as well. We turn next to the analysis of race and gender disparities in business owner earnings. Table 4.4 focuses on the economy as a whole, Table 4.5 on the construction sector and Table 4.6 on the goods and services sector. The numbers shown in each table indicate the percentage difference in that sector between the average annual self-employment earnings of a given race/gender group and comparable nonminority males.

a. Specification 1 - the Basic Model⁸⁶

Specification 1 in Table 4.4 shows large, adverse, and statistically significant business owner earnings disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races and nonminority women, consistent with the presence of discrimination in these markets. Business earnings for African Americans are 40.5 percent lower than for comparable nonminority males; for Hispanics, they are 24.0 percent lower; for Asians/Pacific Islanders, they are 10.9 percent lower; for Native Americans, they are 42.6 percent lower; for persons reporting two or more races, they are 35.8 percent lower; and for nonminority women, they are 40.3 percent lower.

Turning to the construction sector, Specification 1 in Table 4.5 shows large, adverse, and statistically significant business owner earnings disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races and nonminority women, consistent with the presence of discrimination in these markets. Business earnings for African Americans are 41.1 percent lower than for comparable nonminority males; for Hispanics, they are 15.7 percent lower; for Asians/Pacific Islanders, they are 19.9 percent lower; for Native Americans, they are 32.8 percent lower; for persons reporting two or more races, they are 25.8 percent lower; and for nonminority women, they are 40.8 percent lower.

For the Goods and Services sector, Specification 1 in Table 4.6 shows large, adverse, and statistically significant business owner earnings disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races and nonminority women, consistent with the presence of discrimination in these markets. Business earnings for African Americans are 45.5 percent lower than for comparable nonminority males; for Hispanics, they are 34.1 percent lower; for Asians/Pacific Islanders, they are 13.9 percent lower; for Native Americans, they are 49.3 percent lower; for persons reporting two or more races, they are 42.0 percent lower; and for nonminority women, they are 44.9 percent lower.

b. Specifications 2 and 3 - the Full Model Including Austin-Specific Interaction Terms⁸⁷

Next, we turn to Specifications 2 and 3 in Tables 4.4 through 4.6. Specification 2 is the basic regression model enhanced by a set of interaction terms to test whether minorities and women in

⁸⁶ See above, section B.3.a., for a detailed description of Specification 1.

⁸⁷ See above, section B.3.b., for a detailed description of Specifications 2 and 3.

the AUSMA differ significantly from those elsewhere in the U.S. economy. Specification 3 drops any AUSMA interaction terms that are not statistically significant.

For the economy as a whole in 2009-2013, Table 4.4 shows that the AUSMA interaction term for nonminority females is statistically significant and positive, indicating that disparities are, on average, better in the AUSMA for this group than what is observed for the nation as a whole. This result indicates that business owner earnings for nonminority women in the economy as a whole in the AUSMA, on average, were 22.0 percent higher than for nonminority women in the nation as a whole and 18.3 percent lower (-40.3 percent plus 22.0 percent) than for nonminority males in the AUSMA. None of the other AUSMA interaction terms is statistically significant, indicating that disparities are, on average, no better or worse in the AUSMA than what is observed for the nation as a whole.

For the construction sector as well, Table 4.5 shows that none of the AUSMA interaction terms is statistically significant, indicating that disparities are, on average, no better or worse in the AUSMA than what is observed for the nation as a whole.

For the goods and services sector, Table 4.6 shows that the AUSMA interaction term for nonminority females is statistically significant and positive, indicating that disparities are, on average, better in the AUSMA for this group than what is observed for the nation as a whole. This result indicates that business owner earnings for nonminority women in goods and services in the AUSMA, on average, were 32.1 percent higher than for nonminority women in the nation as a whole and 12.8 percent lower (-44.9 percent plus 32.1 percent) than for nonminority males in the AUSMA. None of the other AUSMA interaction terms is statistically significant, indicating that disparities are, on average, no better or worse in the AUSMA than what is observed for the nation as a whole.

6. Findings: Disparities in Business Owner Earnings for VOBs and SDVOBs

In addition to showing business owner earnings disparities by race and gender, Tables 4.4, 4.5 and 4.6 also examine such disparities among VOBs and SDVOBs compared to non-VOBs.

Specification 1 in Table 4.4 shows adverse and statistically significant business owner earnings disparities for VOBs and SDVOBs. For VOBs, the difference is -11.0 percent and for SDVOBs it is -17.7 percent. Specification 1 in Table 4.5 shows comparable results when the basic analysis is restricted to the construction sector. In this sector, adverse and statistically significant wage disparities are once again observed for VOBs, at -10.5 percent, and for SDVOBs at -12.4 percent. Specification 1 in Table 4.6 for the goods and services sector also shows adverse and statistically significant wage disparities for both VOBs and SDVOBs. For VOBs, the difference is -10.7 percent, and for SDVOBs it is -19.1 percent.

Turning to Specifications 2 and 3, none of the interaction terms between the Austin Market area and VOB or SDVOB status were statistically significant. Therefore, the final estimates of business owner earnings disparities for these groups are the same as in Specification 1.

a. Conclusions

As was the case for wage and salary earners, minority and female entrepreneurs earn substantially and significantly less from their efforts than similarly situated nonminority male entrepreneurs. The situation differs little in the City of Austin Market Area from that which is observed for the nation as a whole. These disparities are consistent with the presence of discrimination in commercial markets that adversely affects M/WBEs. Other things equal, if minorities and women are prevented by discrimination from earning remuneration from their entrepreneurial efforts comparable to that of similarly situated nonminority males, then capital reinvestment and growth rates may slow, business failure rates may increase and, as demonstrated in the next section, business formation rates may decrease. Combined, these phenomena result in lower M/WBE availability levels than would be observed in a race- and gender-neutral market area, since discrimination depresses business owner earnings for minority and female entrepreneurs. Business owner earnings, however, are often directly related to whether an owner has the capital to reinvest (firm size), how long a firm survives (firm age), and how much money a firm takes in (individual firm revenues). These observations illustrate why employment size, years in business, and individual firm revenues are especially inappropriate factors to consider when attempting to determine if discrimination has diminished opportunities for M/WBEs.⁸⁸

Adverse business owner earnings disparities were observed for VOBs and SDVOBs in the economy as whole, in the construction sector, and in the goods and services sector. Although these disparities were smaller than those observed for M/WBEs overall, they were substantially larger than what was observed for VOBs and SDVOBs in the wage and salary earnings analysis, consistent with the operation of discrimination against these two groups of business owners as well.

⁸⁸ For more on this topic, see “Understanding Capacity,” in Chapter III, section B.5, *supra*.

Table 4.4. Annual Business Owner Earnings Regressions, All Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.405 (47.97)	-0.405 (47.89)	-0.405 (47.97)
Hispanic	-0.240 (32.52)	-0.240 (32.42)	-0.240 (32.52)
Asian/Pacific Islander	-0.109 (10.10)	-0.109 (10.04)	-0.109 (10.10)
Native American	-0.426 (18.06)	-0.426 (18.00)	-0.426 (18.06)
Two or more races	-0.358 (24.33)	-0.358 (24.21)	-0.358 (24.33)
Nonminority Female	-0.403 (87.45)	-0.403 (87.20)	-0.403 (87.45)
Veteran	-0.110 (11.42)	-0.111 (11.52)	-0.110 (11.42)
Service-disabled veteran	-0.177 (7.38)	-0.177 (7.33)	-0.177 (7.38)
Age	0.175 (117.82)	0.175 (117.81)	0.175 (117.82)
Age ²	-0.002 (102.15)	-0.002 (102.14)	-0.002 (102.15)
AUSMA	-0.005 (0.18)	-0.032 (0.78)	-0.005 (0.18)
AUSMA*African American		0.045 (0.27)	n/a
AUSMA*Hispanic		0.054 (0.74)	n/a
AUSMA*Asian/Pacific Islander		-0.075 (0.53)	n/a
AUSMA*Native American		-0.309 (0.67)	n/a
AUSMA*Two or more races		-0.042 (0.21)	n/a
AUSMA*Nonminority female		0.220 (1.68)	0.220 (1.68)
AUSMA*Veteran		-0.067 (0.23)	n/a
AUSMA*Service-disabled veteran		0.031 (0.49)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	556931	556931	556931
Adj. R ²	.1366	.1366	.1366

Source: NERA calculations from the 2009-2013 ACS Public Use Microdata Sample.

Notes: (1) See above, section B.4.(a)-(b) for a description of specifications 1 through 3; (2) Universe is all persons in the private sector with positive business earnings between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number is the percentage difference in annual business earnings between a given group and nonminority men; (4) Number in parentheses is the absolute value of the associated t-statistic. Using a two-tailed test, t-statistics greater than 1.67 (1.99) (2.64) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) "AUSMA" is shorthand for "City of Austin Market Area," which includes the Austin-Round Rock Metropolitan Statistical Area; (7) "n/a" in Specification 3 means that the category was not included in the regression because it was not statistically significant in Specification 2, as described above in section B.4.b.

Table 4.5. Business Owner Earnings Regressions, Construction and Related Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.411 (19.57)	-0.411 (19.55)	-0.411 (19.57)
Hispanic	-0.157 (10.45)	-0.158 (10.44)	-0.157 (10.45)
Asian/Pacific Islander	-0.199 (5.86)	-0.198 (5.81)	-0.199 (5.86)
Native American	-0.328 (6.46)	-0.327 (6.42)	-0.328 (6.46)
Two or more races	-0.258 (7.07)	-0.257 (7.03)	-0.258 (7.07)
Nonminority female	-0.408 (23.54)	-0.408 (23.46)	-0.408 (23.54)
Veteran	-0.105 (6.10)	-0.105 (6.08)	-0.105 (6.10)
Service-disabled veteran	-0.124 (2.69)	-0.120 (2.58)	-0.124 (2.69)
Age	0.128 (36.53)	0.128 (36.54)	0.128 (36.53)
Age ²	-0.001 (32.93)	-0.001 (32.93)	-0.001 (32.93)
AUSMA	-0.008 (0.14)	-0.014 (0.17)	-0.008 (0.14)
AUSMA*African American		0.199 (0.39)	n/a
AUSMA*Hispanic		0.057 (0.43)	n/a
AUSMA*Asian/Pacific Islander		-0.397 (0.78)	n/a
AUSMA*Native American		-0.196 (0.26)	n/a
AUSMA*Two or more races		-0.276 (0.50)	n/a
AUSMA*Nonminority Female		-0.017 (0.07)	n/a
AUSMA*Veteran		-0.465 (1.10)	n/a
AUSMA*Service-disabled veteran		0.033 (0.13)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	89538	89538	89538
Adj. R ²	.0438	.0438	.0438

Source and Notes: See Table 4.4.

Table 4.6. Business Owner Earnings Regressions, Goods and Services Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.455 (50.59)	-0.455 (50.53)	-0.455 (50.59)
Hispanic	-0.341 (42.95)	-0.342 (42.74)	-0.341 (42.94)
Asian/Pacific Islander	-0.139 (12.15)	-0.138 (12.07)	-0.139 (12.15)
Native American	-0.493 (18.82)	-0.492 (18.75)	-0.493 (18.82)
Two or more races	-0.420 (26.34)	-0.421 (26.28)	-0.420 (26.34)
Nonminority female	-0.449 (100.45)	-0.450 (100.16)	-0.449 (100.45)
Veteran	-0.107 (9.18)	-0.109 (9.34)	-0.109 (9.33)
Service-disabled veteran	-0.191 (6.72)	-0.191 (6.69)	-0.191 (6.72)
Age	0.196 (116.79)	0.196 (116.79)	0.196 (116.79)
Age ²	-0.002 (99.66)	-0.002 (99.66)	-0.002 (99.66)
AUSMA	-0.004 (0.14)	-0.048 (1.02)	-0.020 (0.65)
AUSMA*African American		0.115 (0.60)	n/a
AUSMA*Hispanic		0.032 (0.36)	n/a
AUSMA*Asian/Pacific Islander		-0.093 (0.61)	n/a
AUSMA*Native American		-0.486 (0.94)	n/a
AUSMA*Two or more races		0.141 (0.58)	n/a
AUSMA*Nonminority Female		0.344 (2.16)	0.321 (2.22)
AUSMA*Veteran		0.019 (0.05)	n/a
AUSMA*Service-disabled veteran		0.066 (0.94)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	467393	467393	467393
Adj. R ²	.0895	.0895	.0895

Source and Notes: See Table 4.4.

C. Race and Gender Disparities in Business Formation

As discussed in the two previous sections, discrimination that affects the wages and entrepreneurial earnings of minorities and women will ultimately affect the number of businesses formed by these groups as well. In this section, we turn to an analysis of race and gender disparities in business formation.⁸⁹ We compare self-employment rates by race and gender to determine whether minorities or women are as likely to become entrepreneurs as are similarly situated nonminority males. We find that in most cases they are not as likely to do so, and that minority and female business formation rates would be substantially and significantly higher if markets operated in a race- and gender-neutral manner.

Discrimination in the labor market, symptoms of which are evidenced in Section B.3 above, might cause wage and salary workers to turn to self-employment in hopes of encountering less discrimination from customers and suppliers than from employers and co-workers. Other things equal, and assuming minority and female workers did not believe that discrimination pervaded commercial markets as well, this would lead minority and female business formation rates to be higher than would otherwise be expected.

On the other hand, discrimination in the labor market prevents minorities and women from acquiring the very skills, experience, and positions that are often observed among those who leave the ranks of the wage and salary earners to start their own businesses. Many construction contracting concerns have been formed by individuals who were once employed as foremen or in related positions for other contractors, fewer by those who were employed instead as laborers. Moreover, discrimination in wages and salaries earned in labor markets inhibits the accumulation of capital necessary for business formation. Similarly, discrimination in commercial capital and credit markets, as well as asset and wealth distribution, prevents minorities and women from acquiring the financial credit and capital that are so often prerequisites to starting or expanding a business. Other things being equal, these phenomena would lead minority and female business formation rates to be lower than otherwise would be expected.

Further, discrimination by commercial customers and suppliers against M/WBEs, symptoms of which are evidenced in Section B.4 above and elsewhere, operates to increase input prices and lower output prices for M/WBEs. This discrimination leads to higher rates of failure for some minority- and women-owned firms, lower rates of profitability and growth for others, and prevents some minorities and women from ever starting businesses at all.⁹⁰ All of these phenomena, other things equal, would contribute directly to relatively lower observed rates of minority and female self-employment.

1. Methods and Data

To see if minorities or nonminority women are as likely to be business owners as are comparable nonminority males, we use a statistical technique known as Probit regression. Probit regression is used to determine the relationship between a categorical variable—one that can be characterized

⁸⁹ We use the phrases “business formation rates” and “self-employment rates” interchangeably in this Study.

⁹⁰ See also the materials cited at fn. 71 *supra*.

in terms of a “yes” or a “no” response as opposed to a continuous number—and a set of characteristics that are related to the outcome of the categorical variable. Probit regression produces estimates of the extent to which each characteristic is positively or negatively related to the likelihood that the categorical variable will be a yes or no. For example, Probit regression is used by statisticians to estimate the likelihood that an individual participates in the labor force, retires this year, or contracts a particular disease—these are all variables that can be categorized by a response of “yes” (for example, she is in the labor force) or “no” (for example, she is not in the labor force)—and the extent to which certain factors are positively or negatively related to the likelihood (for example, the more education she has, the more likely that she is in the labor force). Probit regression is one of several techniques that can be used to examine qualitative outcomes. Generally, other techniques such as Logit regression yield similar results.⁹¹ In the present case, Probit regression is used to examine the relationship between the choice to own a business (yes or no) and the other demographic and socioeconomic characteristics in our basic model. The underlying data for this section is once again the 2009-2013 ACS PUMS.

2. Findings: Race and Gender Disparities in Business Formation

As a reference point, Tables 4.7 and 4.8 summarize rates of business ownership during 2009-2013 by race and gender. A noticeable feature of both tables is how much higher, on average, rates are for nonminority males than for minorities and women. Table 4.7, for example, shows a 9.51 percentage point difference between the overall self-employment rate of African Americans and nonminority males in the AUSMA ($15.90 - 6.39 = 9.51$). As shown in the rightmost column of Table 4.7, this 9.51 percentage point gap translates into an African American business formation rate in the AUSMA that is 59.8 percent lower than the nonminority male business formation rate (*i.e.*, $6.39 - 15.90 \div 15.90 \approx -59.8\%$). For Hispanics, the business formation rate is 42.8 percent lower. For Asians/Pacific Islanders, it is 41.6 percent lower. For Native Americans, it is 12.9 percent lower. For persons reporting multiple races, it is 30.6 percent lower. For minorities as a group, it is 44.5 percent lower. For nonminority women, it is 26.9 percent lower; and for M/WBEs overall, it is 38.1 percent lower.

Table 4.8 provides similar information for the construction sector and the goods and services sector. With the sole exception of Native Americans, large deficits are observed in the construction sector for all groups. Large deficits are observed in the goods and services sector as well for all groups.

There is little doubt that a portion of the group differences documented in Tables 4.7 and 4.8 are associated with differences in the distribution of individual productivity characteristics and preferences between minorities, women and nonminority males. It is well known, for example, that earnings tend to increase with labor market experience (*i.e.*, age). It is also true that the propensity toward self-employment increases with labor market experience.⁹² Since most minority populations in the United States have a lower median age than the nonminority population, it is important to test whether the disparities in business ownership evidenced in

⁹¹ For a detailed discussion, see G.S. Maddala (1983). Probit analysis is performed here using the “dprobit” command in the statistical program STATA.

⁹² Wainwright (2000), p. 86.

Tables 4.7 and 4.8 can be explained by differences in the age distribution or in other factors such as education, geographic location or the industry preferences of minorities and nonminority women compared to nonminority males.

Table 4.7. Self-Employment Rates in 2009-2013 for Selected Race and Gender Groups: United States and the City of Austin Market Area, All Industries

Race/Gender	U.S. (%)	City of Austin Market Area (%)	Percent Difference from Nonminority Male in Column (2)
	(1)	(2)	(3)
African American	5.72	6.39	-59.8
Hispanic	8.89	9.09	-42.8
Asian/Pacific Islander	10.66	9.28	-41.6
Native American	8.88	13.85	-12.9
Two or more races	9.26	11.03	-30.6
Minority	8.20	8.82	-44.5
Nonminority female	8.67	11.62	-26.9
M/WBE	8.42	9.85	-38.1
Veteran	11.63	13.23	-16.8
Service-disabled veteran	10.23	11.49	-27.7
Nonminority male	14.01	15.90	

Source: NERA calculations from the 2009-2013 ACS Public Use Microdata Sample.

Table 4.8. Self-Employment Rates in 2009-2013 for Selected Race and Gender Groups: United States and the City of Austin Market Area, Construction Sector and Goods and Services Sector

Race/Gender	U.S. (%)	City of Austin Market Area (%)	Percent Difference from Nonminority Male in Column (2)
	(1)	(2)	(3)
<i>Construction Sector</i>			
African American	18.51	18.51	-31.6
Hispanic	17.34	17.34	-35.9
Asian/Pacific Islander	18.54	18.54	-31.5
Native American	17.73	17.73	-34.5
Two or more races	21.32	21.32	-21.2
Minority	17.79	17.79	-34.3
Nonminority female	15.24	15.24	-43.7
M/WBE	17.27	17.27	-36.2
Veteran	25.26	25.26	-6.7
Service-disabled veteran	20.74	20.74	-23.4
Nonminority male	27.07	27.07	
<i>Goods and Services Sector</i>			
African American	5.15	5.90	-57.5
Hispanic	7.72	8.10	-41.6
Asian/Pacific Islander	10.35	9.05	-34.8
Native American	7.79	11.58	-16.5
Two or more races	8.35	10.94	-21.1
Minority	7.35	8.00	-42.3
Nonminority female	8.51	11.41	-17.7
M/WBE	7.90	9.36	-32.5
Veteran	9.67	11.83	-14.7
Service-disabled veteran	8.83	10.25	-26.1
Nonminority male	11.78	13.87	

Source: NERA calculations from the 2009-2013 ACS Public Use Microdata Sample.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

To do this, the remainder of this section presents a series of regression analyses that test whether large, adverse and statistically significant race and gender disparities for minorities and women remain when such other factors are held constant. Table 4.9 focuses on the economy as a whole and Tables 4.10 and 4.11 focus on the construction sector and the goods and services sector, respectively. The numbers shown in each of these tables indicate the percentage point difference between the probability of business ownership for a given race/gender group compared to similarly situated nonminority males.

a. Specification 1 - the Basic Model⁹³

Specification 1 in Table 4.9 shows large, adverse, and statistically significant business formation disparities for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races and nonminority women consistent with the presence of discrimination in these markets. Specification 1 in Tables 4.10 and 4.11 shows large, negative, and statistically significant business formation disparities for each of these groups in the construction sectors as well as in the goods and services sector.

b. Specifications 2 and 3 - the Full Model Including City of Austin-Specific Interaction Terms⁹⁴

Several of the AUSMA interaction terms included in Specification 2 were significant. The final results are shown in Specification 3 for Tables 4.9 through 4.11.

To summarize for the economy-wide results (Table 4.9):

- For African Americans, business formation rates are 4.0 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Hispanics, business formation rates are 3.3 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Asians/Pacific Islanders, business formation rates are 3.0 percentage points lower than what would be expected in a race- and gender-neutral market area.⁹⁵
- For Native Americans, business formation rates are 3.0 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For persons reporting multiple races, business formation rates are 1.6 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For nonminority women, business formation rates are 2.9 percentage points lower than what would be expected in a race- and gender-neutral market area.

⁹³ See above, section C.2.a., for a detailed description of Specification 1.

⁹⁴ See above, section C.2.b., for a detailed description of Specifications 2 and 3.

⁹⁵ Recall that the net business formation rate is equal to the value of the direct coefficient (on the Asian/Pacific Islander indicator variable in this case) plus the value of the statistically significant coefficient on the AUSMA*Asian/Pacific Islander interaction term. In this example, the 3.0 percent figure is the net result of the direct coefficient for Asians/Pacific Islanders, with a value of -1.5 percent, and the coefficient for Asians/Pacific Islanders interacted with the AUSMA indicator, which is -1.5 percent as well.

To summarize for the Construction sector results (Table 4.10):

- For African Americans, business formation rates are 8.6 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Hispanics, business formation rates are 11.8 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Asians/Pacific Islanders, business formation rates are 5.3 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Native Americans, business formation rates are 9.3 percentage points higher than what would be expected in a race- and gender-neutral market area.
- For persons reporting multiple races, business formation rates are 2.5 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For nonminority women, business formation rates are 10.4 percentage points lower than what would be expected in a race- and gender-neutral market area.

To summarize for the Goods and Services sector results (Table 4.11):

- For African Americans, business formation rates are 5.4 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Hispanics, business formation rates are 3.5 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Asians/Pacific Islanders, business formation rates are 4.2 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For Native Americans, business formation rates are 3.5 percentage points lower than what would be expected in a race- and gender-neutral market area.
- For persons reporting multiple races, business formation rates are 2.0 percentage points higher than what would be expected in a race- and gender-neutral market area.
- For nonminority women, business formation rates are 1.5 percentage points lower than what would be expected in a race- and gender-neutral market area.

3. Findings: Disparities in Business Formation for Veterans and Service-Disabled Veterans

For both veterans and service-disabled veterans, Specification 1 in Tables 4.9, 4.10 and 4.11 shows adverse and statistically significant business formation disparities consistent with the presence of discrimination in these markets.

Two of the AUSMA interaction terms included in Specification 2 was significant—for service-disabled veterans in Table 4.9 and Table 4.11. The final results are shown in Specification 3 for Tables 4.9 through 4.11.

To summarize for the economy-wide results (Table 4.9):

- For Veterans, business formation rates are 2.1 percentage points lower than what would be expected in a veteran-neutral market area.
- For Service-disabled veterans, business formation rates are 1.7 percentage points lower than what would be expected in a veteran-neutral market area.

To summarize for the Construction sector results (Table 4.10):

- For Veterans, business formation rates are 5.1 percentage points lower than what would be expected in a veteran-neutral market area.
- For Service-disabled veterans, business formation rates are 7.1 percentage points lower than what would be expected in a veteran-neutral market area.

To summarize for the Goods and Services sector results (Table 4.11):

- For Veterans, business formation rates are 3.0 percentage points lower than what would be expected in a veteran-neutral market area.
- For Service-disabled veterans, business formation rates are 1.3 percentage points lower than what would be expected in a veteran-neutral market area.

Table 4.9. Business Formation Regressions, All Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.040 (124.32)	-0.040 (124.11)	-0.040 (124.33)
Hispanic	-0.033 (116.67)	-0.033 (116.04)	-0.033 (116.59)
Asian/Pacific Islander	-0.015 (36.55)	-0.015 (36.24)	-0.015 (36.24)
Native American	-0.030 (30.27)	-0.030 (30.30)	-0.030 (30.27)
Two or more races	-0.016 (22.66)	-0.016 (22.59)	-0.016 (22.65)
Nonminority Female	-0.029 (128.18)	-0.029 (128.09)	-0.029 (128.13)
Veteran	-0.021 (56.41)	-0.021 (56.32)	-0.021 (56.41)
Service-disabled veteran	-0.006 (5.91)	-0.006 (5.98)	-0.006 (5.90)
Age	0.008 (150.53)	0.008 (150.53)	0.008 (150.53)
Age ²	-0.000 (96.53)	-0.000 (96.53)	-0.000 (96.53)
AUSMA	0.006 (5.07)	0.003 (1.71)	0.004 (2.82)
AUSMA*African American		0.002 (0.24)	n/a
AUSMA*Hispanic		-0.000 (0.10)	n/a
AUSMA*Asian/Pacific Islander		-0.014 (2.68)	-0.015 (2.86)
AUSMA*Native American		0.043 (1.37)	n/a
AUSMA*Two or more races		0.001 (0.15)	n/a
AUSMA*Nonminority Female		0.006 (1.14)	n/a
AUSMA*Veteran		0.017 (1.20)	n/a
AUSMA*Service-disabled veteran		0.011 (3.70)	0.010 (3.82)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	5894981	5894981	5894981
Pseudo R ²	.2099	.2099	.2099

Source: NERA calculations from the 2009-2013 ACS Public Use Microdata Sample.

Notes: (1) See above, section C.2.(a)-(b) for a description of specifications 1 through 3; (2) Universe is all private sector labor force participants between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number represents the percentage point probability difference in business ownership rates between a given group and nonminority men, evaluated at the mean business ownership rate for the estimation sample; (4) Number in parentheses is the absolute value of the associated z-statistic. Using a two-tailed test, z-statistics greater than 1.67 (1.99) (2.64) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) "AUSMA" is shorthand for "City of Austin Market Area," which includes the Austin-Round Rock Metropolitan Statistical Area; (7) "n/a" in Specification 3 indicates that the category was not included in the regression because it was not statistically significant in Specification 2, as described above in section C.2.b.

Table 4.10. Business Formation Regressions, Construction and Related Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.086 (30.70)	-0.086 (30.61)	-0.086 (30.68)
Hispanic	-0.065 (34.99)	-0.064 (34.44)	-0.065 (34.46)
Asian/Pacific Islander	-0.053 (12.83)	-0.053 (12.75)	-0.053 (12.81)
Native American	-0.093 (14.96)	-0.094 (14.98)	-0.093 (14.95)
Two or more races	-0.025 (4.76)	-0.024 (4.69)	-0.025 (4.75)
Nonminority Female	-0.104 (51.64)	-0.104 (51.41)	-0.104 (51.65)
Veteran	-0.051 (23.23)	-0.051 (23.22)	-0.051 (23.22)
Service-disabled veteran	-0.020 (3.28)	-0.020 (3.29)	-0.020 (3.29)
Age	0.019 (48.99)	0.019 (48.99)	0.019 (48.99)
Age ²	-0.000 (28.95)	-0.000 (28.94)	-0.000 (28.94)
AUSMA	0.012 (1.61)	0.042 (3.65)	0.034 (3.50)
AUSMA*African American		-0.019 (0.33)	n/a
AUSMA*Hispanic		-0.058 (3.86)	-0.053 (3.67)
AUSMA*Asian/Pacific Islander		-0.032 (0.47)	n/a
AUSMA*Native American		0.227 (1.24)	n/a
AUSMA*Two or more races		-0.074 (0.93)	n/a
AUSMA*Nonminority female		-0.032 (1.08)	n/a
AUSMA*Veteran		0.038 (0.44)	n/a
AUSMA*Service-disabled veteran		-0.020 (0.75)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	504928	504928	504928
Pseudo R ²	.0719	.0720	.0720

Source and Notes: See Table 4.9.

Table 4.11. Business Formation Regressions, Goods and Services Industries, 2009-2013

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.054 (133.07)	-0.054 (132.79)	-0.054 (133.09)
Hispanic	-0.035 (90.55)	-0.035 (90.05)	-0.035 (90.45)
Asian/Pacific Islander	-0.023 (46.40)	-0.023 (46.03)	-0.023 (46.03)
Native American	-0.035 (24.98)	-0.035 (24.99)	-0.035 (24.99)
Two or more races	-0.020 (21.74)	-0.020 (21.76)	-0.020 (21.73)
Nonminority Female	-0.032 (117.88)	-0.032 (117.91)	-0.032 (117.96)
Veteran	-0.030 (60.38)	-0.030 (60.36)	-0.030 (60.39)
Service-disabled veteran	-0.002 (1.31)	-0.002 (1.31)	-0.002 (1.31)
Age	0.009 (130.66)	0.009 (130.66)	0.009 (130.66)
Age ²	-0.000 (82.93)	-0.000 (82.93)	-0.000 (82.93)
AUSMA	0.017 (10.11)	0.010 (3.83)	0.011 (5.19)
AUSMA*African American		-0.005 (0.58)	n/a
AUSMA*Hispanic		0.001 (0.34)	n/a
AUSMA*Asian/Pacific Islander		-0.018 (2.76)	-0.019 (2.92)
AUSMA*Native American		0.024 (0.65)	n/a
AUSMA*Two or more races		0.016 (1.25)	n/a
AUSMA*Nonminority female		0.017 (2.29)	0.017 (2.46)
AUSMA*Veteran		0.001 (0.08)	n/a
AUSMA*Service-disabled veteran		0.020 (4.99)	0.019 (5.34)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	5436958	5436958	5436958
Pseudo R ²	.0546	.0546	.0546

Source and Notes: See Table 4.9.

a. Conclusions

This section has demonstrated that, for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races, minorities as a group, nonminority women and minorities and women as a group, observed business formation rates in the overall economy of the City of Austin Market Area are substantially and statistically significantly lower than those that would be expected to be observed if commercial markets operated in a race- and gender-neutral manner. With the exception of Native Americans, the same is true in the construction sector; and with the exception of persons reporting multiple races, the same is true in the goods and services sector. Minorities and women in general are substantially and significantly less likely to own their own businesses than would be expected based upon their observable demographic characteristics including age, education, geographic location, industry and trends over time. Moreover, as demonstrated in previous sections, these groups also suffer substantial and significant earnings disadvantages relative to comparable nonminority males whether they work as wage and salary employees or as entrepreneurs. These findings are consistent with results that would be observed in a discriminatory market area.

Large, adverse and statistically significant business formation disparities were observed for veterans and service-disabled veterans in the construction sector, in the goods and services sector, and for veterans, in the economy as a whole. These disparities were, in general, of a magnitude similar to what was observed for M/WBEs overall, consistent with the operation of discrimination against these two groups of veteran business owners as well.

D. Expected Business Formation Rates—Implications for Current M/WBE Availability⁹⁶

In Table 4.12, the Probit regression results for the City of Austin market area from Tables 4.9, 4.10 and 4.11 for the overall economy, the construction sector, and the goods and services sector, respectively, are combined with weighted average self-employment rates by race and gender from the 2009-2013 ACS PUMS (Tables 4.7 and 4.8) to determine the disparity between baseline availability and expected availability in a race- and gender-neutral market area. These figures appear in column (3) of each panel in Table 4.12.

The business formation rate in the AUSMA for African Americans in the construction sector, for example, is 18.51 percent (see middle panel of Table 4.12, top row). According to the regression specification underlying Table 4.10, however, that rate would be 27.11 percent, or 46.5 percent higher, in a race- and gender-neutral market area. Put differently, the disparity ratio of the actual business formation rate to the expected business formation rate for African Americans in construction in the AUSMA is 68.28. Disparity indices are adverse and statistically significant in construction for African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, persons reporting multiple races, minorities as a group, nonminority women, and M/WBEs as a group. They were adverse and statistically significant as well for VOBs and SDVOBs.

⁹⁶ In addition to quantifying how discrimination may have depressed current measured levels of M/WBE availability, this exercise also addresses the requirements of 49 C.F.R. 26.45 (“Step 2”) for the United States Department of Transportation Disadvantaged Business Enterprise Program.

In the construction sector, the largest disparities observed are for M/WBEs as a group (57.43), followed in descending order by nonminority women (59.44), Hispanics (59.51), minorities as a group (59.52), Native Americans (65.59), African Americans (68.28), Asians/Pacific Islanders (77.77), VOBs (83.20), persons reporting multiple races (89.50), and SDVOBs (91.20).

In the goods and services sector, the largest disparities observed are for African Americans (48.82), followed in descending order by Hispanics (68.81), Native Americans (69.00), Asians/Pacific Islanders (71.13), minorities as a group (71.85), nonminority women (72.67), M/WBEs as a group (74.88), VOBs (76.32), persons reporting multiple races (80.68), and SDVOBs (97.79).

In the economy as a whole, the largest disparities observed are for African Americans (61.50), followed in descending order by minorities as a group (72.18), M/WBEs as a group (73.23), Hispanics (73.37), Asians/Pacific Islanders (75.57), nonminority women (80.03), Native Americans (82.20), VOBs (86.30), persons reporting multiple races (87.33), and SDVOBs (95.04).

Given the large disparities observed in all sectors of the economy for most presumptive groups, goal-setters might consider adjusting baseline estimates of M/WBE availability upward to partly account for the depressing effects of discrimination on current measured levels of availability. The business formation rate disparities documented in Table 4.12 can be combined with the estimates of current M/WBE availability documented in Table 3.11 and elsewhere to provide estimates of expected availability. Such estimates appear in Table 6.5, below. Expected M/WBE availability exceeds actual current M/WBE availability overall and in each major procurement category.⁹⁷

⁹⁷ Only four exceptions were observed out of 70 measurements. See Table 6.5 and fn. **Error! Bookmark not defined.**

⁹⁸ Complete data from the 2012 SBO is not scheduled for release until December 2015.

Table 4.12. Actual and Potential Business Formation Rates in the City of Austin Market Area

Race/Gender	Business Formation Rate (%)	Expected Business Formation Rate (%)	Disparity Ratio
<i>All Industries</i>	(1)	(2)	(3)
African American	6.39	10.39	61.50
Hispanic	9.09	12.39	73.37
Asian/Pacific Islander	9.28	12.28	75.57
Native American	13.85	16.85	82.20
Two or more races	11.03	12.63	87.33
Minority	8.82	12.22	72.18
Nonminority female	11.62	14.52	80.03
M/WBE	9.85	13.45	73.23
VOB	13.23	15.33	86.30
SDVOB	11.49	12.09	95.04
<i>Construction Sector</i>	(1)	(2)	(3)
African American	18.51	27.11	68.28
Hispanic	17.34	29.14	59.51
Asian/Pacific Islander	18.54	23.84	77.77
Native American	17.73	27.03	65.59
Two or more races	21.32	23.82	89.50
Minority	17.79	29.89	59.52
Nonminority female	15.24	25.64	59.44
M/WBE	17.27	30.07	57.43
VOB	25.26	30.36	83.20
SDVOB	20.74	22.74	91.20
<i>Goods and Services Sector</i>	(1)	(2)	(3)
African American	5.15	10.55	48.82
Hispanic	7.72	11.22	68.81
Asian/Pacific Islander	10.35	14.55	71.13
Native American	7.79	11.29	69.00
Two or more races	8.35	10.35	80.68
Minority	7.35	10.23	71.85
Nonminority female	8.51	11.71	72.67
M/WBE	7.90	10.55	74.88
VOB	9.67	12.67	76.32
SDVOB	8.83	9.03	97.79

Source: 2009-2013 ACS Public Use Microdata Sample. See Tables 4.7 through 4.11.

Notes: (A) Figures are rounded. Rounding was performed subsequent to any mathematical calculations. (B) Figures in column (1) are average self-employment rates weighted using ACS population-based person weights, as also shown in Tables 4.7 and 4.8. (C) Figures in column (2), top, middle, and bottom panels, are derived by combining the figure in column (1) with the corresponding result from the regression reported in Table 4.9, 4.10 or 4.11, respectively. Minority and M/WBE figures were derived from similar regression analyses, not reported separately. (D) Column (3) is the figure in column (1) divided by the figure in column (2), with the result multiplied by 100. (E) An empty cell in the Disparity Ratio column indicates that no adverse disparity was observed for that category.

E. Evidence from the Survey of Business Owners

As a final check on the statistical findings in this chapter, we present evidence from a Census Bureau data collection effort dedicated to M/WBEs. The Census Bureau's *Survey of Business Owners and Self-Employed Persons* (SBO), formerly known as the *Survey of Minority- and Women-Owned Business Enterprises* (SMWOBE), collects and disseminates data on the number, sales, employment, and payrolls of businesses owned by women and members of racial and ethnic minority groups. This survey has been conducted every five years since 1972 as part of the *Economic Census* program. Data from the 2007 SBO, the most recent, were released in 2011.⁹⁸

The SBO estimates are created by matching data collected from income tax returns by the Internal Revenue Service with Social Security Administration data on race and ethnicity, and supplementing this information using statistical sampling methods. The unique field for conducting this matching is the Social Security Number (SSN) or the Employer Identification Number (EIN), as reported on the tax return.⁹⁹

The SBO covers women and five groups of minorities: (1) African Americans, (2) Hispanics, (3) Asians, (4) Native Hawaiians and Pacific Islanders, and (5) American Indians and Alaskan Natives. The 2007 SBO also includes comparative information for nonminority male-owned firms.¹⁰⁰ Additionally, the SBO provides data on VOBs.¹⁰¹

The SBO provides aggregate estimates of the number of minority-owned, women-owned and veteran-owned firms and their annual sales and receipts. The SBO distinguishes employer firms (*i.e.*, firms with one or more paid employees) from nonemployer firms, and for the former also includes estimates of aggregate annual employment and payroll.

⁹⁸ Complete data from the 2012 SBO is not scheduled for release until December 2015.

⁹⁹ Prior to 2002, "C" corporations were not included in the SMWOBE universe due to technical difficulties. This has been rectified in the 2002 SBO. For more information, consult the discussion of SBO survey methodology at <http://www.census.gov/econ/sbo/>.

¹⁰⁰ In the ACS PUMS data, discussed above, the unit of analysis is the business owner, or self-employed person. In the SBO data, the unit of analysis is the business rather than the business owner. Furthermore, unlike most other business statistics, including the other components of the *Economic Census*, the unit of analysis in the SBO is the firm, rather than the establishment.

¹⁰¹ The SBO contains a very limited amount of information on SDVOBs. In the U.S. as a whole, across all sectors of the economy, 8.3 percent of VOBs were also SDVOBs in 2007. Among firms with paid employees, the figure is 6.0 percent. In the Construction sector, the figure is 8.7 percent for all firms and 6.4 percent for firms with paid employees. In the Professional Services sector the figure is 8.1 percent for all firms and 6.8 percent for firms with paid employees. This means that, according to SBO, SDVOBs are approximately 0.77 percent of all U.S. firms and 0.57 percent of all firms with paid employees (using veteran figures from Table 4.13). In the Construction and Professional Services sector, the corresponding figures are approximately 0.95 percent and 0.70 percent, respectively (using veteran figures from Table 4.15). Unfortunately, no SDVOB data is available in the SBO at the state level, nor is any sales and receipts data available for these firms. According to the Small Business Administration, the fraction of all veterans that are service-disabled has increased significantly since the 2007 SBO, to approximately 9.3 percent in 2012. Lichtenstein (2013, p.2) states that the increase "could be the result of an increasing number of service-disabled veterans returning from war in the Gulf and Afghanistan."

Compared to the ACS PUMS, the SBO is more limited in the scope of industrial and geographic detail it provides. Nonetheless, it contains a wealth of information on the character of minority and female and veteran business enterprise in the U.S as a whole as well as in the State of Texas.¹⁰² In the remainder of this section, we present SBO statistics for the United States as a whole and in Texas and calculate disparity indices from them. We find that results in the SBO regarding M/WBE disparities are consistent with our findings above using the ACS PUMS. The results for VOBs are less consistent with the findings from the ACS PUMS.

Tables 4.13 and 4.14 contain data for all industries combined. Table 4.13 is for the U.S. as a whole, Table 4.14 is for the State of Texas. Panel A in these two tables summarizes the SBO results for each race and/or gender grouping as well as for veterans. For example, Panel A of Table 4.13 shows a total of 26.29 million firms in the U.S. in 2007 (column 1) with overall sales and receipts of \$10.949 trillion (column 2). Of these 26.29 million firms, 5.19 million had one or more employees (column 3) and these 5.19 million firms had overall sales and receipts of \$10.015 trillion (column 4). Column (5) shows a total of 56.63 million employees on the payroll of these 5.19 million firms and a total annual payroll expense of \$1.941 trillion (column 6).

The remaining rows in Panel A provide comparable statistics for nonminority male-owned, women-owned, minority-owned, and veteran-owned firms. For example, Table 4.13 shows that there were 1.9 million African American-owned firms counted in the SBO, and that these 1.9 million firms registered \$135.7 billion in sales and receipts. It also shows that 106,566 of these African American-owned firms had one or more employees, and that they employed a total of 909,552 workers with an annual payroll total of \$23.33 billion.

Panel A of Table 4.14 provides comparable information for Texas. The SBO counted 2,111,601 firms in Texas, of which 609,947 were female-owned; 154,283 were African American-owned; 447,589 were Hispanic-owned; 114,297 were Asian-owned; 1,196 were Native Hawaiian- or Pacific Islander-owned; 18,997 were Native American-owned; and 199,491 were veteran-owned.

Panel B in each Table converts the figures in Panel A to percentage distributions within each column. For example, Column (1) in Panel B of Table 4.14 shows that African American-owned firms were 7.31 percent of all firms in Texas and female-owned firms were 28.89 percent. Additionally, 21.20 percent of firms were Hispanic-owned, 5.41 percent were Asian-owned, 0.06 percent were Native Hawaiian- or Pacific Islander-owned, 0.90 percent were Native American-owned, and 9.45 percent were veteran-owned.

Column (2) in Panel B provides the same percentage distribution for overall sales and receipts. Table 4.14 shows that although African American-owned firms were 7.31 percent of all firms in Texas, they accounted for only 1.08 percent of all sales and receipts. Hispanic-owned firms were 21.2 percent of all firms in Texas, but accounted for just 7.21 percent of all sales and receipts. Asian-owned firms were 5.41 percent of all firms in Texas, and accounted for 4.68 percent of all sales and receipts. Native Hawaiian- or Pacific Islander-owned firms were 0.06 percent of all firms in Texas, but accounted for just 0.04 percent of all sales and receipts. Native American-owned firms were 0.9 percent of all firms in Texas, but accounted for only 0.43 percent of sales

¹⁰² It is, in general, not possible with the SBO dataset to examine geographic divisions below the state level.

and receipts. Female-owned firms were 28.89 percent of all firms in Texas, but accounted for just 11.27 percent of all sales and receipts. Veteran-owned firms, in contrast, were 9.45 percent of all firms in Texas and earned 11.1 percent of all sales and receipts.

Table 4.13. Disparity Ratios from the 2007 Survey of Business Owners, United States, All Industries

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	26,294,860	10,949,461,874	5,189,968	10,015,142,962	56,626,554	1,940,572,944
Nonminority Male	10,943,636	7,725,275,376	2,753,871	7,255,760,511	37,138,139	1,386,782,737
Female	7,792,115	1,196,608,004	909,661	1,014,366,348	7,520,121	214,673,400
African American	1,921,864	135,739,834	106,566	97,144,898	909,552	23,334,792
Hispanic	2,260,269	350,661,243	248,852	279,920,707	1,908,161	54,295,508
Asian	1,549,559	506,047,751	397,426	453,574,194	2,807,771	79,230,459
Native Hawaiian/Pac. Islander	37,687	6,319,357	4,151	5,250,301	37,801	1,217,138
Am. Indian & Alaska Native	236,691	34,353,842	23,662	27,494,075	185,037	5,930,247
Veteran	2,447,608	1,219,551,078	491,349	1,125,784,785	5,792,869	210,046,726
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	41.62%	70.55%	53.06%	72.45%	65.58%	71.46%
Female	29.63%	10.93%	17.53%	10.13%	13.28%	11.06%
African American	7.31%	1.24%	2.05%	0.97%	1.61%	1.20%
Hispanic	8.60%	3.20%	4.79%	2.79%	3.37%	2.80%
Asian	5.89%	4.62%	7.66%	4.53%	4.96%	4.08%
Native Hawaiian/Pac. Islander	0.14%	0.06%	0.08%	0.05%	0.07%	0.06%
Am. Indian & Alaska Native	0.90%	0.31%	0.46%	0.27%	0.33%	0.31%
Veteran	9.31%	11.14%	9.47%	11.24%	10.23%	10.82%
Panel C. Disparity Ratios						
	(2) vs. (1)		(4) vs. (3)		(5) vs. (3)	(6) vs. (3)
Nonminority Male	169.52		136.54		123.60	134.68
Female	36.88		57.79		75.77	63.12
African American	16.96		47.24		78.23	58.56
Hispanic	37.26		58.29		70.28	58.35
Asian	78.43		59.14		64.75	53.32
Native Hawaiian/Pac. Islander	40.27		65.54		83.46	78.42
Am. Indian & Alaska Native	34.86		60.21		71.67	67.03
Veteran	119.66		118.73		108.06	114.33

Source: NERA calculations using 2007 SBO. Notes: (A) Figures are rounded. Rounding was performed subsequent to any mathematical calculations. (B) Excludes publicly-owned, foreign-owned, and not-for-profit firms. (C) "n/a" indicates that data were not disclosed due to confidentiality or other publication restrictions.

Similar results are obtained when the survey results are restricted to firms with one or more paid employees. Column (3) in Table 4.14, for example, shows that although nonminority male-owned firms were 44.69 percent of all employer firms, they accounted for 68.65 percent of all employer firm sales and receipts. African American-owned firms, in contrast, were 2.13 percent of all employer firms, but they accounted for only 0.79 percent of all employer firm sales and

receipts. Hispanic-owned firms were 12.20 percent of all employer firms, but they accounted for only 5.89 percent of all employer firm sales and receipts. Asian-owned firms were 8.62 percent of all employer firms, but they accounted for only 4.67 percent of all employer firm sales and receipts. Native Hawaiian- and Pacific Islander-owned firms were 0.05 percent of all employer firms and accounted for 0.04 percent of all employer firm sales and receipts. Native American-owned firms were 0.44 percent of all employer firms and accounted for 0.38 percent of all employer firm sales and receipts. Women accounted for 18.18 percent of all employer firms, but earned only 10.58 percent of all employer firm sales and receipts. Finally, veteran-owned firms accounted for 9.54 percent of employer-owned firms and earned 11.23 percent of all employer firm sales and receipts.

Table 4.14. Disparity Ratios from the 2007 Survey of Business Owners, State of Texas, All Industries

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	2,111,601	858,627,169	338,463	775,650,085	4,159,621	138,975,158
Nonminority Male	701,799	566,436,396	151,273	532,507,640	2,471,982	92,019,512
Female	609,947	96,803,111	61,546	82,099,584	588,474	16,826,122
African American	154,283	9,280,648	7,205	6,147,658	72,652	1,646,570
Hispanic	447,589	61,895,886	41,283	45,672,015	395,673	9,929,303
Asian	114,297	40,209,344	29,162	36,222,156	206,545	5,311,859
Native Hawaiian/Pac. Islander	1,196	376,969	161	333,851	1,106	41,064
Am. Indian & Alaska Native	18,997	3,683,877	1,478	2,984,437	13,168	494,351
Veteran	199,491	95,303,052	32,293	87,078,461	401,424	14,577,723
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	33.24%	65.97%	44.69%	68.65%	59.43%	66.21%
Female	28.89%	11.27%	18.18%	10.58%	14.15%	12.11%
African American	7.31%	1.08%	2.13%	0.79%	1.75%	1.18%
Hispanic	21.20%	7.21%	12.20%	5.89%	9.51%	7.14%
Asian	5.41%	4.68%	8.62%	4.67%	4.97%	3.82%
Native Hawaiian/Pac. Islander	0.06%	0.04%	0.05%	0.04%	0.03%	0.03%
Am. Indian & Alaska Native	0.90%	0.43%	0.44%	0.38%	0.32%	0.36%
Veteran	9.45%	11.10%	9.54%	11.23%	9.65%	10.49%
Panel C. Disparity Ratios						
		(2) vs. (1)		(4) vs. (3)	(5) vs. (3)	(6) vs. (3)
Nonminority Male		198.49		153.61	132.97	148.15
Female		39.03		58.21	77.80	66.58
African American		14.79		37.23	82.05	55.66
Hispanic		34.01		48.28	77.99	58.58
Asian		86.52		54.20	57.63	44.36
Native Hawaiian/Pac. Islander		77.51		90.48	55.90	62.12
Am. Indian & Alaska Native		47.69		88.11	72.49	81.46
Veteran		117.49		117.67	101.15	109.94

Source and Notes: See Table 4.13.

Disparities between the fraction of firms that are minority- or women-owned and their fraction of sales and receipts in Texas are observed for African Americans, Hispanics, Asians, Native Hawaiians and Pacific Islanders, Native Americans and women, both for employer firms and nonemployer firms. The disparity indices are presented in Panel C of each table. Disparity indices of approximately 80 percent or less indicate disparate impact consistent with business discrimination (0 percent being complete disparity and 100 percent being full parity). In Texas (Table 4.14), the sales and receipts disparity indices (in columns 2 and 4) fall at or below the 80 percent threshold in 9 out of 12 cases for minority- or women-owned firms. All of these disparity indices are statistically significant within a 95 percent confidence interval. Adverse disparities were not observed in Table 4.14 for veteran-owned firms.

Table 4.15. Disparity Ratios from the 2007 Survey of Business Owners, United States, Construction and Professional Services

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	7,069,005	2,247,219,546	1,473,633	1,968,365,597	10,803,954	515,161,851
Nonminority Male	3,843,180	1,649,355,770	924,548	1,483,625,570	7,664,496	381,436,430
Female	1,365,249	203,964,647	196,614	165,319,338	1,124,710	49,343,438
African American	289,579	25,787,994	22,521	18,937,276	135,685	5,647,555
Hispanic	526,190	79,164,324	63,055	58,649,224	390,113	15,224,090
Asian	284,427	61,003,128	48,732	51,923,279	303,058	17,195,039
Native Hawaiian/Pac. Islander	8,610	2,161,094	1,311	1,853,781	9,923	509,611
Am. Indian & Alaska Native	61,579	11,032,792	8,047	8,831,344	51,974	2,228,594
Veteran	794,914	248,158,669	156,795	216,010,591	1,156,640	55,839,899
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	54.37%	73.40%	62.74%	75.37%	70.94%	74.04%
Female	19.31%	9.08%	13.34%	8.40%	10.41%	9.58%
African American	4.10%	1.15%	1.53%	0.96%	1.26%	1.10%
Hispanic	7.44%	3.52%	4.28%	2.98%	3.61%	2.96%
Asian	4.02%	2.71%	3.31%	2.64%	2.81%	3.34%
Native Hawaiian/Pac. Islander	0.12%	0.10%	0.09%	0.09%	0.09%	0.10%
Am. Indian & Alaska Native	0.87%	0.49%	0.55%	0.45%	0.48%	0.43%
Veteran	11.25%	11.04%	10.64%	10.97%	10.71%	10.84%
Panel C. Disparity Ratios						
		(2) vs. (1)		(4) vs. (3)	(5) vs. (3)	(6) vs. (3)
Nonminority Male		135.00		120.14	113.07	118.02
Female		47.00		62.95	78.02	71.79
African American		28.01		62.95	82.18	71.73
Hispanic		47.33		69.63	84.39	69.06
Asian		67.47		79.77	84.82	100.93
Native Hawaiian/Pac. Islander		78.96		105.86	103.24	111.19
Am. Indian & Alaska Native		56.36		82.16	88.10	79.22
Veteran		98.20		103.14	100.62	101.87

Source and Notes: See Table 4.13.

Table 4.15 shows comparable SBO data for the Construction and Professional Services sector in the U.S. as a whole. Among firms overall, large and adverse disparities are evident for African Americans, Hispanics, Asians, Native Hawaiians and Pacific Islanders, Native Americans and women. For example, although African Americans account for 4.10 percent of all firms in the Construction and Professional Services sector, they earn only 1.15 percent of all sales and receipts in that sector. Hispanics account for 7.44 percent of firms but only 3.52 percent of sales and receipts. For Asians, the figures are 4.02 percent and 2.71 percent, respectively. For Native Hawaiians and Pacific Islanders, the figures are 0.12 percent and 0.10 percent, respectively. For Native Americans, the figures are 0.87 percent and 0.49 percent, respectively. Finally, women account for 19.31 percent of all Construction and Professional Services firms but earned only 9.08 percent of all sales and receipts. In contrast, veteran-owned firms were 11.25 percent of all firms in Construction and Professional Services and earned 11.04 percent of all sales and receipts.

Among firms with paid employees in Table 4.15, adverse disparities are observed for African Americans, Hispanics, Asians, Native Americans, and women. These disparities are large (*i.e.*, approximately 80 or less) for African Americans, Hispanics, Asians and women. For veterans, however, no adverse disparities are observed in Table 4.15. Overall, disparities for minorities and women are slightly less acute among firms with paid employees than among firms as a whole. However, they remain far larger than the comparable figure for nonminority male-owned firms. This is evident in that the fraction of employer firms compared to the fraction of all firms is far higher among nonminority males than among other race and gender groups. In Table 4.15, for example, nonminority males represent 54.37 percent of all firms but 62.74 percent of employer firms. For all other groups, the direction of this ratio is reversed. That is, each group's fraction among employer firms is substantially smaller than its fraction among firms as a whole, whereas for nonminority males it is larger.

Table 4.16 shows results for the Construction and Professional Services sector in Texas. Among all firms in Construction and Professional Services, large and adverse disparities are observed for African Americans, Hispanics, Asians, Native Americans and women.¹⁰³ Among firms with paid employees, adverse disparities are observed for African Americans, Hispanics, Asians, Native Americans, and women. These disparities are large for African Americans, Hispanics, Asians and women. As in Table 4.15, nonminority males have a much higher ratio of employer firms to firms as a whole than do minorities or women. Unlike in Table 4.15, adverse disparities are observed for veterans in the Construction and Professional Services sector in Texas. The disparity for veteran-owned employer firms is large as well.

¹⁰³ Results for Native Hawaiians & Pacific Islanders were suppressed by the Census to avoid compromising confidentiality restrictions.

Table 4.16. Disparity Ratios from the 2007 Survey of Business Owners, State of Texas, Construction and Professional Services

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	577,727	168,582,260	88,239	141,837,348	759,356	36,688,005
Nonminority Male	244,007	112,868,557	46,981	100,673,944	496,040	25,676,048
Female	105,085	16,582,726	13,023	13,368,143	89,104	3,925,256
African American	22,603	1,476,877	1,331	941,172	7,876	298,790
Hispanic	127,054	15,096,003	9,712	8,856,325	62,700	2,255,684
Asian	17,759	3,338,580	2,539	1,850,978	12,044	747,165
Native Hawaiian/Pac. Islander	n/a	n/a	n/a	n/a	n/a	n/a
Am. Indian & Alaska Native	6,819	1,147,833	539	832,574	5,233	222,373
Veteran	62,890	15,342,889	9,744	12,419,303	68,158	3,290,921
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	42.24%	66.95%	53.24%	70.98%	65.32%	69.98%
Female	18.19%	9.84%	14.76%	9.42%	11.73%	10.70%
African American	3.91%	0.88%	1.51%	0.66%	1.04%	0.81%
Hispanic	21.99%	8.95%	11.01%	6.24%	8.26%	6.15%
Asian	3.07%	1.98%	2.88%	1.31%	1.59%	2.04%
Native Hawaiian/Pac. Islander	n/a	n/a	n/a	n/a	n/a	n/a
Am. Indian & Alaska Native	1.18%	0.68%	0.61%	0.59%	0.69%	0.61%
Veteran	10.89%	9.10%	11.04%	8.76%	8.98%	8.97%
Panel C. Disparity Ratios						
		(2) vs. (1)		(4) vs. (3)	(5) vs. (3)	(6) vs. (3)
Nonminority Male		158.52		133.31	122.69	131.44
Female		54.08		63.86	79.51	72.49
African American		22.39		43.99	68.76	53.99
Hispanic		40.72		56.73	75.02	55.86
Asian		64.42		45.35	55.12	70.78
Native Hawaiian/Pac. Islander		n/a		n/a	n/a	n/a
Am. Indian & Alaska Native		57.69		96.10	112.82	99.23
Veteran		83.61		79.29	81.28	81.23

Source and Notes: See Table 4.13.

Table 4.17 shows comparable data for the Goods and Services sector in the U.S. as a whole. Here, large and adverse disparities are evident for African Americans, Hispanics, Asians, Native Hawaiians and Pacific Islanders, Native Americans and women. African Americans, for example, account for 8.49 percent of all firms in the Goods and Services sector, they earned only 1.26 percent of all sales and receipts in that sector. Hispanics account for 9.02 percent of firms but only 3.12 percent of sales and receipts. For Asians, the figures are 6.58 percent and 5.11 percent, respectively. For Native Hawaiians and Pacific Islanders, the figures are 0.15 percent and 0.05 percent, respectively. For Native Americans, the figures are 0.91 percent and 0.27 percent, respectively. Women account for 33.43 percent of all Goods and Services firms but earned only 11.41 percent of all sales and receipts. Comparable, though slightly smaller, disparities are observed as well among firms with paid employees in the Goods and Services sector. For veteran-owned firms, in contrast, no disparities are observed in this table.

Table 4.17. Disparity Ratios from the 2007 Survey of Business Owners, United States, Goods and Services

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	19,225,855	8,702,242,328	3,716,335	8,046,777,365	45,822,600	1,425,411,093
Nonminority Male	7,100,456	6,075,919,606	1,829,323	5,772,134,941	29,473,643	1,005,346,307
Female	6,426,866	992,643,357	713,047	849,047,010	6,395,411	165,329,962
African American	1,632,285	109,951,840	84,045	78,207,622	773,867	17,687,237
Hispanic	1,734,079	271,496,919	185,797	221,271,483	1,518,048	39,071,418
Asian	1,265,132	445,044,623	348,694	401,650,915	2,504,713	62,035,420
Native Hawaiian/Pac. Islander	29,077	4,158,263	2,840	3,396,520	27,878	707,527
Am. Indian & Alaska Native	175,112	23,321,050	15,615	18,662,731	133,063	3,701,653
Veteran	1,652,694	971,392,409	334,554	909,774,194	4,636,229	154,206,827
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	36.93%	69.82%	49.22%	71.73%	64.32%	70.53%
Female	33.43%	11.41%	19.19%	10.55%	13.96%	11.60%
African American	8.49%	1.26%	2.26%	0.97%	1.69%	1.24%
Hispanic	9.02%	3.12%	5.00%	2.75%	3.31%	2.74%
Asian	6.58%	5.11%	9.38%	4.99%	5.47%	4.35%
Native Hawaiian/Pac. Islander	0.15%	0.05%	0.08%	0.04%	0.06%	0.05%
Am. Indian & Alaska Native	0.91%	0.27%	0.42%	0.23%	0.29%	0.26%
Veteran	8.60%	11.16%	9.00%	11.31%	10.12%	10.82%
Panel C. Disparity Ratios						
		(2) vs. (1)		(4) vs. (3)	(5) vs. (3)	(6) vs. (3)
Nonminority Male		189.05		145.73	130.67	143.28
Female		34.12		54.99	72.74	60.45
African American		14.88		42.98	74.68	54.87
Hispanic		34.59		55.00	66.26	54.83
Asian		77.72		53.20	58.26	46.38
Native Hawaiian/Pac. Islander		31.59		55.23	79.61	64.95
Am. Indian & Alaska Native		29.42		55.20	69.11	61.81
Veteran		129.85		125.59	112.39	120.17

Source and Notes: See Table 4.13.

Finally, Table 4.18 shows comparable results for the Goods and Services sector in Texas. Among all firms in Goods and Services, adverse disparities are observed for African Americans, Hispanics, Asians, Native Americans and women. The disparities are large for African Americans, Hispanics, Native Americans and women. Among firms with paid employees, adverse disparities are observed for African Americans, Hispanics, Asians, Native Americans and women. These disparities are large for African Americans, Hispanics, Asians and women. As in Table 4.17, nonminority males have a much higher ratio of employer firms to firms as a whole than do minorities or women. Also, as in Table 4.17, no adverse disparities are observed for veterans. All of these disparity indices are statistically significant within a 95 percent confidence interval.

Table 4.18. Disparity Ratios from the 2007 Survey of Business Owners, State of Texas, Goods and Services

	Number of Firms	Sales and Receipts (\$000s)	Employer Firms	Sales and Receipts (\$000s)	Employees	Payroll (\$000s)
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Levels						
All Firms	1,533,874	690,044,909	250,224	633,812,737	3,400,265	102,287,153
Nonminority Male	457,792	453,567,839	104,292	431,833,696	1,975,942	66,343,464
Female	504,862	80,220,385	48,523	68,731,441	499,370	12,900,866
African American	131,680	7,803,771	5,874	5,206,486	64,776	1,347,780
Hispanic	320,535	46,799,883	31,571	36,815,690	332,973	7,673,619
Asian	96,538	36,870,764	26,623	34,371,178	194,501	4,564,694
Native Hawaiian/Pac. Islander	n/a	n/a	n/a	n/a	n/a	n/a
Am. Indian & Alaska Native	12,178	2,536,044	939	2,151,863	7,935	271,978
Veteran	136,601	79,960,163	22,549	74,659,158	333,266	11,286,802
Panel B. Column Percentages						
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Nonminority Male	29.85%	65.73%	41.68%	68.13%	58.11%	64.86%
Female	32.91%	11.63%	19.39%	10.84%	14.69%	12.61%
African American	8.58%	1.13%	2.35%	0.82%	1.91%	1.32%
Hispanic	20.90%	6.78%	12.62%	5.81%	9.79%	7.50%
Asian	6.29%	5.34%	10.64%	5.42%	5.72%	4.46%
Native Hawaiian/Pac. Islander	n/a	n/a	n/a	n/a	n/a	n/a
Am. Indian & Alaska Native	0.79%	0.37%	0.38%	0.34%	0.23%	0.27%
Veteran	8.91%	11.59%	9.01%	11.78%	9.80%	11.03%
Panel C. Disparity Ratios						
		(2) vs. (1)		(4) vs. (3)	(5) vs. (3)	(6) vs. (3)
Nonminority Male		220.24		163.47	139.42	155.62
Female		35.32		55.92	75.73	65.04
African American		13.17		34.99	81.15	56.13
Hispanic		32.46		46.04	77.61	59.46
Asian		84.90		50.97	53.76	41.94
Native Hawaiian/Pac. Islander		n/a		n/a	n/a	n/a
Am. Indian & Alaska Native		46.29		90.47	62.19	70.86
Veteran		130.12		130.71	108.76	122.45

Source and Notes: See Table 4.13.

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V. Statistical Disparities in Capital Markets

A. Introduction

Discrimination occurs whenever the terms of a transaction are affected by personal characteristics of the participants that are not relevant to the transaction. Among such characteristics, the most commonly considered are race, ethnicity and gender. In labor markets, this might translate into equally productive workers in similar jobs being paid different salaries because of their race, ethnicity or gender. In credit markets, it might translate into loan approvals differing across racial or gender groups with otherwise similar financial backgrounds.

In this chapter, we examine whether there is evidence consistent with the presence of discrimination in the small business credit market against minority-owned or women-owned small businesses. Discrimination in the credit market against such businesses can have an important effect on the likelihood that they will succeed. Moreover, discrimination in the credit market might even prevent businesses from opening in the first place, might negatively impact the size a firm could obtain, and/or shorten its longevity in the market.¹⁰⁴

In our analysis, we use data from the Federal Reserve Board to examine the existence or otherwise of discrimination in the small business credit market for 1993, 1998 and 2003. These surveys are based on a large representative sample of firms with fewer than 500 employees and are administered by the Federal Reserve Board and the U.S. Small Business Administration. The 1993 and 1998 surveys deliberately oversampled minority-owned firms but the 2003 survey did not.¹⁰⁵

We also present in this Chapter analyses of data covering 2003 through 2010 using two additional datasets. However, as discussed in more detail below, the availability of relevant data after 2003 is severely restricted due to the Federal Reserve Board's unfortunate decision to cancel the *Survey of Small Business Finances*; which was the principal source of information on the access of small M/WBEs to commercial credit and capital.

The analyses presented in this Chapter provide qualitative and quantitative evidence consistent with the presence of discrimination against minorities in the credit market for small businesses. For example, we find that African American-owned firms are much more likely to report being seriously concerned with credit market problems and report being less likely to apply for credit because they fear the loan would be denied. Moreover, after controlling for a large number of characteristics of the firms, we find that African American-owned firms, Hispanic-owned firms, and to a lesser extent other minority-owned firms, are substantially and statistically significantly

¹⁰⁴ Again, as noted in Chapter IV, these factors also illustrate why, in a disparity study intended to answer the question of whether discrimination is present in business enterprise, adjusting availability for “capacity” factors such as firm age, firm size or firm revenues, is not a legitimate practice when there is evidence that suggests that these factors themselves are tainted by discrimination. To do so would be to inappropriately introduce one or more endogenous variables into the analysis.

¹⁰⁵ The 2003 survey took other steps, however, to increase the likelihood that minority-owned and women-owned firms were captured in the sampling frame. For more details, see National Opinion Research Center (2005), p. 11.

more likely to be denied credit than are nonminority-owned firms. We find some evidence that women are discriminated against in this market as well. The principal results are as follows:

- Minority-owned firms were more likely to report that they did not apply for a loan over the preceding three years because they feared the loan would be denied (see Tables 5.15, 5.22, 5.29).
- When minority-owned firms applied for a loan, their loan requests were substantially more likely to be denied than non-minorities, even after accounting for differences like firm size and credit history (see Tables 5.8, 5.9, 5.18, 5.19, 5.25, 5.26).
- When minority-owned firms *did* receive a loan, they were obligated to pay higher interest rates on the loans than comparable nonminority-owned firms (see Tables 5.13, 5.14, 5.21, 5.27).
- A larger proportion of minority-owned firms than nonminority-owned firms report that credit market conditions are a serious concern (see Tables 5.3, 5.4, 5.5, 5.6, 5.7, 5.17, 5.24).
- A larger share of minority-owned firms than nonminority-owned firms believes that the availability of credit is the most important issue likely to confront them in the upcoming year (see Tables 5.5, 5.6).
- There is no evidence that discrimination in the market for credit is significantly different in the West South Central census region or in the construction and construction-related professional services industries than it is in the nation or the economy as a whole (various tables).
- There is no evidence that the level of discrimination in the market for credit has diminished between 1993 and 2003 (various tables).

The structure of this chapter is as follows. First, we outline the main theories of discrimination and discuss how they might be tested. Second, we examine the evidence on the existence of capital/liquidity constraints facing individuals in the mortgage market, households in the non-mortgage loan market, and for small businesses in the commercial credit market. Third, we describe the data files used in the remainder of the chapter and then examine in more detail problems faced by minority-owned firms in obtaining credit. Fourth, we provide a series of answers to criticisms. Finally, we present our conclusions.

We begin with the 1993 dataset and continue chronologically through the 2003 dataset and then to evidence from NERA's own comparable surveys conducted in various geographies between 1999 and 2007. This chronological progression allows the reader to see the consistency of the main findings over time. This approach serves as well to demonstrate the value of over-sampling minority and female small business owners, as was the case in the 1993 and 1998 surveys, but

not the 2003 survey. Unfortunately, the much anticipated 2008 survey results never materialized because the Federal Reserve cancelled this important survey effort.¹⁰⁶

B. Theoretical Framework and Review of the Literature

Most recent economic studies of discrimination draw on the analyses contained in Gary Becker's (1957) *The Economics of Discrimination*. Becker's main contribution was to translate the notion of discrimination into financial terms. Discrimination, in this view, results from the desire of owners, workers, or customers to avoid contact with certain groups. This being the case, transactions with the undesired groups would require more favorable terms than those that occur with a desired group. Assume that the primary objective of a financial institution is to maximize their expected profits. The expected return on a loan will depend on the interest rate charged and the likelihood that a borrower defaults. The financial institution would approve any loan for which the expected return on the loan exceeded the cost of the funds to the institution. Discrimination would then result in either (a) higher interest rates being charged to undesired groups having otherwise similar characteristics to the desired group, or (b) requiring better characteristics (*i.e.*, a lower expected default rate) from the undesired group at any given interest rate. In other words, applicants from the disadvantaged group might either be appraised more rigorously or be given less favorable terms on the loan.

A similar connection between the likelihood of loan approval and the race, ethnicity or gender of the applicant might also be found if lenders employ statistical discrimination—meaning that lenders use personal characteristics such as race, ethnicity or gender to infer the likelihood of default on the loan. If experience has suggested that certain groups of individuals are on average more or less likely to default, then the lender may use this information to economize on the costs of gathering more directly relevant information. Hence, discrimination would not reflect the preferences of the owner but would rather reflect an attempt to minimize costs. Empirically, the racial, ethnic or gender characteristics of the applicant could proxy for unobserved characteristics of their creditworthiness.

There has been an active debate about whether banks discriminate against minority applicants for mortgages. In particular, banks were often accused of “redlining”—that is, not granting loans for properties located in certain areas. To analyze that issue, the Home Mortgage Disclosure Act was passed to require lenders to disclose information on the geographic location of their home mortgage loans. These data, however, were not sufficient to assess whether or not there was discrimination in the market for mortgage loans.

In 1992, researchers at the Federal Reserve Bank of Boston collected additional information from mortgage lenders (Munnell, et al., 1996). In particular, they tried to collect any information that might be deemed economically relevant to whether a loan would be approved. In the raw data, non-minorities had 10 percent of their loans rejected whereas rejection rates were 28 percent for both African Americans and Hispanics. Even after the creditworthiness of the borrowers (including the amount of the debt, debt-to-income ratio, credit history, loan characteristics, *etc.*) were controlled for, African Americans were still found to be 7 percentage

¹⁰⁶ For more on this, see fn. 155 below.

points less likely to be granted the loan. A variety of criticisms have been launched at this study (see, for example, Horne, 1994; Day and Liebowitz, 1998; Harrison, 1998). Responses to these criticisms are found in Browne and Tootell (1995).

In addition to the type of statistical analysis done in the Munnell, et al. (1996) study, two other approaches have been used to measure discrimination in mortgage markets. First, Federal Reserve regulators can examine a lending institution's files to try to identify any cases where a loan rejection looks suspicious. Second, audit studies have been used with paired "identical" applicants. Such studies have also found evidence of discrimination (*c.f.* Cloud and Galster, 1993) although the audit approach is not without its critics (Heckman, 1998).

Another relevant subset of the literature is concerned with the severity of liquidity constraints affecting consumers in non-mortgage credit markets. A consumer is said to be liquidity-constrained when lenders refuse to make the household a loan or offer the household less than they wished to borrow (Ferri and Simon, 1997). Many studies have suggested that roughly twenty percent of U.S. families are liquidity-constrained (*c.f.* Hall and Mishkin, 1982; and Jappelli, 1990). As might be expected, liquidity-constrained households are typically younger, with less wealth and accumulated savings (Hayashi, 1985; and Jappelli, 1990). The research shows minority households to be substantially more likely to be liquidity-constrained even when a variety of financial characteristics of households are controlled for (Jappelli, 1990; and Ferri and Simon, 1997).

We now turn to the more directly relevant evidence on liquidity constraints facing small businesses. Just like individuals and households, businesses can also face liquidity constraints.¹⁰⁷ Liquidity constraints can be a problem in starting a business as well as in running it. Discrimination in the credit market against minority-owned small businesses can have a devastating effect on the success of such businesses, and even prevent them from opening in the first place. Evidence of the latter effect is provided in the economics literature on self-employment.¹⁰⁸

¹⁰⁷ Evans and Leighton (1989) and Evans and Jovanovic (1989) have argued formally that entrepreneurs face difficulties borrowing money. As in the discussion above, such individuals are labeled liquidity constrained by economists. Using data from the National Longitudinal Survey of Youth from 1966-1981 and the Current Population Surveys from 1968-1987, these authors found that, all else equal, people with greater family assets are more likely to switch to self-employment from employment. Blanchflower and Oswald (1998) studied the probability that an individual reports him or herself as self-employed. Consistent with the existence of capital constraints on potential entrepreneurs, their econometric estimates imply that the probability of being self-employed depends positively upon whether the individual ever received an inheritance or gift. Additionally, when directly questioned in interview surveys, potential entrepreneurs say that raising capital is their principal problem. Holtz-Eakin, et al. (1994a, 1994b) examine flows in and out of self-employment and find that inheritances both raise entry and slow exit. Black, de Meza and Jeffreys (1996) find that housing equity plays an important role in shaping the supply of entrepreneurs. Lindh and Ohlsson (1996) suggest that the probability of being self-employed increases when people receive windfall gains in the form of lottery winnings and inheritances.

¹⁰⁸ See Chapter IV, above.

In his 2003 report for *Builders Association of Greater Chicago v. the City of Chicago*,¹⁰⁹ Bates argued that “from its origins, the black-business community has been constrained by limited access to credit, limited opportunities for education and training, and nonminority stereotypes about suitable roles for minorities in society” (Bates, 1989; Bates, 1993; Bates, 1973). Indeed, as Bates points out, Gunner Myrdal observed,

The Negro businessman ... encounters greater difficulties than whites in securing credit. This is partly due to the marginal position of Negro business. It is also partly due to prejudicial opinions among whites concerning business ability and personal reliability of Negroes. In either case a vicious circle is in operation keeping Negro business down.”¹¹⁰

Bates goes on to argue that commercial banks lend most easily to nonminority males who possess significant amounts of equity capital to invest in their businesses (Bates, 1991a). Apart from banks, an important source of debt capital for small business is likely to be family and friends, but the low wealth of African American households reduces the availability of debt capital that family and friends could invest in small business operations (Bates, 1993; Bates, 1991b).

Additional evidence indicates that capital constraints for African American-owned businesses are particularly large. For instance, Bates (1989) finds that racial differences in levels of financial capital do have a significant effect upon racial patterns in business failure rates. Fairlie and Meyer (1996) find that racial groups with higher levels of unearned income have higher levels of self-employment. In an important paper, Fairlie (1999) uses data from the 1968-1989 Panel Study of Income Dynamics to examine why African American men are one-third as likely to be self-employed as nonminority men. The author finds that the large discrepancy is due to an African American transition rate into self-employment that is approximately one half the nonminority rate and an African American transition rate out of self-employment that is twice the nonminority rate. He finds that capital constraints—measured by interest income and lump-sum cash payments—significantly reduce the flow into self-employment from wage/salary work, with this effect being nearly seven times larger for self-employed African Americans than for nonminority self-employed persons. Fairlie then attempts to decompose the racial gap in the transition rate into self-employment into a part due to differences in the distributions of individual characteristics and a part due to differences in the processes generating the transitions. He finds that differences in the distributions of characteristics between African Americans and non-minorities explain only a part of the racial gap in the transition rate into self-employment. In addition, racial differences in specific variables, such as levels of assets and the likelihood of having a self-employed father provide important contributions to the gap. He concludes, however, that “the remaining part of the gap is large and is due to racial differences in the coefficients. Unfortunately, we know much less about the causes of these differences. They may be partly caused by lending or consumer discrimination against blacks” (1999, p. 14).

There is also research into racial differences in access to credit among small businesses. Cavalluzzo and Cavalluzzo (1998) use data from the 1988-1989 National Survey of Small

¹⁰⁹ 298 F.Supp.2d 725 (N.D. Ill. 2003).

¹¹⁰ G. Myrdal (1944, p. 308).

Business Finances (NSSBF), conducted by the Board of Governors of the Federal Reserve System, to analyze differences in application rates, denial rates, and other outcomes by race, ethnicity and gender in a manner similar to the econometric models reported in this Study. This paper documents that a large discrepancy exists in credit access between non-minorities and minority-owned firms that cannot be explained by a handful of firm characteristics. Unfortunately, the earlier NSSBF data did not over-sample minority-owned firms and included limited information on a firm's credit history and that of its owner, reducing the ability to provide a powerful test of the causal impact of race, ethnicity or gender on loan decisions. In an unpublished paper, Cole (1998) uses the 1993 NSSBF and estimates models of loan denials similar in nature to those discussed in this Study.

The present analysis takes advantage of the 1993 NSSBF data, the 1998 Survey of Small Business Finances (SSBF) data, and the 2003 SSBF data. All three datasets have better information on creditworthiness than did the earlier NSSBF data, and the 1993 and 1998 surveys have a larger sample of minority-owned firms than did the earlier NSSBF data. These datasets are also used to conduct an extensive set of specification checks designed to weigh the possibility that our results are subject to alternative interpretations.

C. Empirical Framework and Description of the Data

1. Introduction

Disputes about discrimination typically originate in differences in the average outcomes for two groups. To determine whether a difference in the loan denial rate for African American-owned firms compared to nonminority-owned firms is consistent with discrimination, it is necessary to compare African American- and nonminority-owned firms that have similar risks of default; that is, the fraction of the African American firms' loans that would be approved if they had the same creditworthiness as the nonminority-owned firms. A standard approach to this problem is to statistically control for firms' characteristics relevant to the loan decision. If African American-owned firms with the same likelihood of default as nonminority-owned firms are less likely to be approved, then it is appropriate to attribute such a difference to discrimination.

Following Munnell, et al. (1996) we estimated the following loan denial equation:

$$(1) \quad \text{Prob}(D_i = 1) = \Phi(\beta_0 + \beta_1 CW_i + \beta_2 X_i + \beta_3 R_i),$$

where D_i represents an indicator variable for loan denial for firm i (that is, 1 if the loan is denied and 0 if accepted), CW represents measures of creditworthiness, X represents other firm characteristics, R represents the race, ethnicity or gender of the firm's ownership, and Φ is the cumulative normal probability distribution.¹¹¹ This econometric model can be thought of as a reduced form version of a structural model that incorporates firms' demand for and financial institutions' supply of loan funds as a function of the interest rate and other factors.¹¹² Within the

¹¹¹ Additional discussion of Probit regression appears in Chapter IV, Section C.1.

¹¹² Maddala and Trost (1994) describe two variants of such a model, one in which the interest rate is exogenous and another in which the interest rate is endogenously determined, but is capped so that some firms' loan applications are approved and others are rejected. If the interest rate is exogenous, they show that a reduced form

framework of this model, a positive estimate of β_3 is consistent with the presence of discrimination.¹¹³

2. 1993 NSSBF Data

The 1993 NSSBF data contain substantial information regarding credit availability on a nationally representative target sample of for-profit, non-farm, non-financial business enterprises with fewer than 500 employees. The survey was conducted during 1994 and 1995 for the Board of Governors of the Federal Reserve System and the U.S. Small Business Administration; the data relate to the years 1992 and 1993. The data file used here contains 4,637 firms.¹¹⁴ In this NSSBF file, minority-owned firms were over-sampled, but sampling weights are provided to generate nationally representative estimates. Of the firms surveyed, 9.5 percent were owned by African Americans, 6.4 percent were owned by Hispanics, and 7.4 percent were owned by individuals of other races (*i.e.*, Asians/Pacific Islanders, Native Americans).¹¹⁵

Table 5.1 presents population-weighted sample means from these data for all firms in the sample that applied for credit. The estimates indicate that African American-owned firms are almost 2.5 times more likely to have a loan application rejected as are non-Hispanic White-owned firms (hereafter “nonminority”) (65.9 percent versus 26.9 percent).¹¹⁶ Other minority groups are denied at rates higher than nonminorities as well, but the magnitude of the African American-to-nonminority differential is particularly large.

Minority-owned firms, however, do have characteristics that are different from those of nonminority-owned firms, and such differences may contribute to the gap in loan denial rates. For instance, minority-owned firms were younger, smaller (whether measured in terms of sales or employment), more likely to be located in urban areas, and more likely to have an owner with fewer years of experience than their nonminority counterparts. Minority firms were also less

model which controls for the loan amount, such as we report below, uniquely identifies supply-side differences in the treatment of African American-owned firms. If the interest rate is endogenous, a reduced form approach requires an assumption that the determinants of demand for non-minority and African American-owned firms are identical, other things being equal. The main alternative empirical strategy is to estimate a structural supply and demand model, in which proper identification generally is not feasible. Any characteristic of the borrower that affects his/her expected rate of return on the investment will affect his/her ability to repay and should be taken into consideration by the lender as well. For instance, in their structural model of mortgage decisions, Maddala and Trost (1994) impose questionable exclusion restrictions, like omitting marital status from the loan supply equation.

¹¹³ The Equal Credit Opportunity Act prohibits discrimination in access to credit by race and would apply to both Becker-type and statistical discrimination.

¹¹⁴ The median size of firms in the sample was 5.5 and mean size was 31.6 full-time equivalent employees; 440 firms out of 4,637 had 100 or more full-time equivalent employees.

¹¹⁵ There were also two firms in the “Other race” category in 1993 that reported multiple or mixed race.

¹¹⁶ Cavalluzzo and Cavalluzzo (1998) examined these outcomes using the 1987 NSSBF and similarly found that denial rates (weighted) are considerably higher for minorities. Nonminority-owned firms had a denial rate for loans of 22 percent compared with 56 percent for African Americans, 36 percent for Hispanics, and 24 percent for other races, which are broadly similar to the differences reported here. These estimates for minority groups are estimated with less precision, however, because of the smaller number of minority-owned firms in the 1987 sample.

creditworthy, on average, than their nonminority counterparts, as measured by whether (a) the owner had legal judgments against him or her over the previous three years, (b) the firm had been delinquent for more than 60 days on business obligations over the preceding three years, or (c) the owner had been delinquent for more than 60 days on personal obligations over the prior three years. Additionally, compared to nonminority-owned firms, African American-owned firms were also more likely, on average, to have owners who had declared bankruptcy over the preceding seven years.

Minority-owned firms also sought smaller amounts of credit than nonminority-owned firms. This was particularly true for African American-owned firms, who requested loans that were, on average, about 60 percent smaller than those requested by nonminority-owned firms, and Hispanic-owned firms, who requested loans about 42 percent smaller than those requested by nonminority-owned firms.

The NSSBF database does not identify the specific city or state where the firm is located; instead, data are reported for four census regions, nine census divisions, and urban or rural location. Table 5.2 presents evidence for the West South Central (WSC) division, which includes the City of Austin, the balance of the State of Texas and three surrounding states.¹¹⁷ This WSC sample includes 515 firms, of which the owners of 223 firms reported that they had applied for a loan over the preceding three-year period.

The overall denial rate in the WSC is slightly higher than the national rate reported in Table 5.1, but this difference is not statistically significant. The difference in the denial rates between African American-owned firms and nonminority-owned firms is also slightly larger in the WSC (39.0 percentage points nationally and 43.3 percentage points in the WSC), but again this difference is not statistically significant. On balance, however, the weighted sample means are not statistically significantly different in the WSC than in the nation as a whole—either overall or by race, ethnicity or gender.

¹¹⁷ The West South Central division includes Arkansas, Louisiana, Oklahoma and Texas.

Table 5.1. Selected Population-Weighted Sample Means of Loan Applicants from 1993 NSSBF Data

	All	Non-minority	African American	Hispanic	Other Races
% of Firms Denied in the Last Three Years	28.8	26.9	65.9	35.9	39.9
<i>Credit History of Firm/Owners</i>					
% Owners with Judgments Against Them	4.8	4.1	16.9	5.2	15.2
% Firms Delinquent in Business Obligations	24.2	23.1	49.0	25.1	31.6
% Owners Delinquent on Personal Obligations	14.0	12.6	43.4	14.8	24.5
% Owners Declared Bankruptcy in Past 7yrs	2.4	2.4	5.3	2.0	0.8
<i>Other Firm Characteristics</i>					
% Female-Owned	17.9	18.1	18.2	9.7	23.1
Sales (in 1,000s of 1992 \$)	1795.0	1870.6	588.6	1361.3	1309.1
Profits (in 1,000s of 1992 \$)	86.7	84.5	59.9	189.5	54.0
Assets (in 1,000s of 1992 \$)	889.4	922.5	230.3	745.6	747.3
Liabilities (in 1,000s of 1992 \$)	547.4	572.8	146.2	308.6	486.0
Owner's Years of Experience	18.3	18.7	15.3	15.9	14.9
Owner's Share of Business	77.1	76.5	86.4	83.9	77.1
% ≤ 8 th Grade Education	0.8	0.7	0.0	3.4	1.0
% 9 th -11 th Grade Education	2.2	2.2	3.7	1.8	1.2
% High School Graduate	19.6	19.7	12.8	27.7	14.9
% Some College	28.0	28.3	36.0	20.6	19.8
% College Graduate	29.2	29.2	28.0	24.1	36.5
% Postgraduate Education	20.2	19.9	19.5	22.3	26.6
% Line of credit	48.7	49.1	35.8	52.8	43.7
Total Full-time Employment in 1990	11.4	11.8	6.8	9.3	8.8
Total Full-time Employment in 1992	13.6	13.9	8.3	10.8	12.3
Firm age, in years	13.4	13.6	11.5	13.3	9.3
% New Firm Since 1990	9.4	9.4	13.0	6.4	9.5
% Firms Located in MSA	76.5	75.1	91.2	90.7	85.7
% Sole Proprietorship	32.8	32.3	48.6	38.2	24.2
% Partnership	7.8	7.8	7.7	6.7	7.9
% S Corporation	26.1	27.1	11.7	13.7	27.1
% C Corporation	33.4	32.8	32.1	41.4	40.8
% Existing Relationship with Lender	24.6	24.7	12.8	29.6	25.7
% Firms with Local Sales Market	54.1	54.7	42.9	55.0	47.4
<i>Characteristics of Loan Application</i>					
Amount Requested (in 1,000s of 1992 \$)	300.4	310.8	126.5	179.1	310.5
% Loans to be Used for Working Capital	8.4	8.8	4.9	4.6	5.5
% Loans to be Used for Equipment/Machinery	2.3	2.4	1.7	0.2	0.6
% Loans to be Used for Land/Buildings	0.4	0.4	0.9	0.0	0.0
% Loans to be Backed by Real Estate	28.3	28.6	24.7	26.2	24.7
Sample Size (unweighted)	2,007	1,648	170	96	93

Source: NERA calculations from 1993 NSSBF.

Notes: (1) Sample weights are used to provide statistics that are nationally representative of all small businesses. (2) Sample restricted to firms that applied for a loan over the preceding three years.

Table 5.2. Selected Sample Means of Loan Applicants—WSC

	All	Non-Minority	African American	Hispanic	Other Races
% of Firms Denied in the Last Three Years	30.3	28.1	71.4	18.6	49.5
<i>Credit History of Firm/Owners</i>					
% Owners with Judgments Against Them	5.9	3.6	32.9	4.9	20.1
% Firms Delinquent in Business Obligations	25.3	22.9	56.6	11.2	57.6
% Owners Delinquent on Personal Obligations	12.6	9.0	62.4	7.0	35.6
% Owners Declared Bankruptcy in Past 7yrs	3.1	3.0	5.7	4.7	0.0
<i>Other Firm Characteristics</i>					
% Female-Owned	22.3	22.7	22.2	14.7	29.3
Sales (in 1,000s of 1992 \$)	1556.0	1715.7	279.3	1072.8	1044.6
Profits (in 1,000s of 1992 \$)	109.6	127.4	44.1	73.6	-20.8
Assets (in 1,000s of 1992 \$)	759.2	848.0	173.6	316.2	657.7
Liabilities (in 1,000s of 1992 \$)	402.8	446.9	55.4	117.7	482.4
Owner's Years of Experience	17.9	18.9	12.9	15.4	12.4
Owner's Share of Business	78.8	77.1	92.9	91.6	71.6
% ≤ 8 th Grade Education	1.8	0.8	0.0	12.5	0.0
% 9 th -11 th Grade Education	2.6	3.0	0.0	0.0	3.1
% High School Graduate	13.7	11.5	0.0	23.7	33.7
% Some College	25.7	26.3	59.6	20.8	3.6
% College Graduate	31.9	33.6	31.6	25.6	19.2
% Postgraduate Education	24.4	24.7	8.8	17.4	40.5
% Line of credit	45.7	44.4	16.8	66.6	49.6
Total Full-time Employment in 1990	9.5	10.5	4.5	5.5	6.7
Total Full-time Employment in 1992	12.6	13.8	5.9	7.7	8.4
Firm age, in years	12.4	13.0	10.4	12.1	6.4
% New Firm Since 1990	10.1	11.2	18.6	2.0	3.1
% Firms Located in MSA	75.1	71.7	92.0	89.3	86.7
% Sole Proprietorship	38.1	35.7	75.0	53.9	23.0
% Partnership	7.1	7.6	9.4	7.0	0.0
% S Corporation	27.1	28.6	8.0	9.8	45.7
% C Corporation	27.7	28.2	7.7	29.3	31.3
% Existing Relationship with Lender	27.4	26.5	6.3	45.1	25.5
% Firms with Local Sales Market	55.1	57.4	64.4	48.1	30.6
<i>Characteristics of Loan Application</i>					
Amount Requested (in 1,000s of 1992 \$)	230.5	251.1	51.2	69.4	319.2
% Loans to be Used for Working Capital	11.3	12.5	0.0	2.6	16.1
% Loans to be Used for Equipment/Machinery	3.6	4.2	0.0	0.0	3.1
% Loans to be Used for Land/Buildings	0.1	0.1	0.0	0.0	0.0
% Loans to be Backed by Real Estate	19.6	20.3	7.4	21.5	16.1
Total Sample Size (unweighted)	515	343	43	82	47

Source: See Table 5.1.

Notes: (1) Sample weights are used to provide statistics that are nationally representative of all small businesses. (2) Some variable means are computed from slightly smaller samples because of missing values. (3) "Other Races" are not reported separately due to small sample size.

D. Qualitative Evidence

Before moving on to the results of our multivariate analysis, we first report on what business owners themselves say are their main problems. While this evidence is not conclusive in determining whether discrimination exists, it highlights firms' perceptions regarding discrimination in obtaining credit. That African American-owned firms and other minorities report greater difficulty in obtaining commercial than do nonminority-owned firms, but report other types of problems no more frequently, suggests either that discrimination takes place or that perceptions of discrimination exist that are unwarranted. It therefore complements the econometric analysis provided subsequently, which can distinguish between these two hypotheses.

Table 5.3 summarizes, for the U.S. as a whole, responses to specific questions about problems that firms confronted over the 12-month period before the date of response. In the top panel, respondents were asked to what extent credit market conditions had been a problem. African Americans and Hispanics were much more likely to say that it had been a "serious" problem (31.3 percent and 22.9 percent, respectively) than nonminorities (12.7 percent). The bottom panel of the table reports the results for eight other designated problem areas: (1) training costs; (2) worker's compensation costs; (3) health insurance costs; (4) IRS regulation or penalties; (5) environmental regulations; (6) The American with Disabilities Act; (7) the Occupational Safety and Health Act; and (8) The Family and Medical Leave Act. Differences between African American-owned firms and Hispanic-owned firms, on the one hand, and nonminority-owned firms, on the other, are much less pronounced in these eight areas than they are in relation to credit market conditions.¹¹⁸ The finding that minority-owned firms are largely indistinguishable from nonminority-owned firms in reporting a variety of problems, except for the case of credit, indicates that these firms perceive credit availability to be a particular problem for them.

Results are broadly similar in Table 5.4 for the WSC division—with African American, Hispanic, and other minority-owned firms being more likely than nonminority-owned firms to say that credit market conditions had been a serious problem in the preceding 12 months.

¹¹⁸ We also estimated a series of ordered Logit equations (not reported) to control for differences across firms in their creditworthiness, location, industry, size, and the like. It is apparent from these regressions that African American-owned firms were more likely to report that credit market conditions were especially serious.

Table 5.3. Problems Firms Experienced During Preceding 12 Months—USA

	All	Non-minority	African American	Hispanic	Other Races
<i>Credit Market Conditions</i>					
Percent reporting not a problem	66.2	67.3	43.1	58.9	65.8
Percent reporting somewhat of a problem	20.1	19.9	25.6	18.2	21.3
Percent reporting serious problem	13.7	12.7	31.3	22.9	12.9
<i>Other Potential Problems (% reporting problem is serious)</i>					
Training costs	6.5	6.6	7.2	6.3	4.3
Worker's compensation costs	21.7	21.0	19.3	30.6	28.7
Health insurance costs	32.5	31.6	38.1	44.3	35.0
IRS regulation or penalties	12.3	11.8	17.1	17.9	13.2
Environmental regulations	8.5	8.5	5.6	7.4	11.0
Americans with Disabilities Act	2.7	2.6	3.6	2.7	3.9
Occupational Safety and Health Act	4.5	4.5	3.9	3.6	6.2
Family and Medical Leave Act	2.7	2.5	4.5	3.1	4.8
Number of observations (unweighted)	2,007	1,648	170	96	93

Source: See Table 5.1.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Table 5.4. Problems Firms Experienced During Preceding 12 Months—WSC

	All	Non-minority	African American	Hispanic	Other Races
<i>Credit Market Conditions</i>					
Percent reporting not a problem	65.6	67.6	39.8	51.3	74.8
Percent reporting somewhat of a problem	17.9	18.1	22.3	23.6	6.6
Percent reporting serious problem	16.5	14.4	37.9	25.1	18.5
<i>Other Potential Problems (% reporting problem is serious)</i>					
Training costs	8.5	9.0	10.4	2.4	10.8
Worker's compensation costs	24.6	24.1	23.9	22.7	33.1
Health insurance costs	32.6	29.4	33.7	44.9	49.2
IRS regulation or penalties	16.3	15.4	28.6	16.4	19.7
Environmental regulations	10.6	10.2	5.6	7.5	20.5
Americans with Disabilities Act	5.0	4.5	8.5	1.6	13.4
Occupational Safety and Health Act	6.7	6.1	7.5	4.5	16.0
Family and Medical Leave Act	4.8	4.7	2.8	4.2	6.6
Number of observations (unweighted)	515	343	43	82	47

Source: See Table 5.1.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Tables 5.5 and 5.6 report the views of NSSBF respondents for the U.S. as a whole and the WSC division, respectively on the most important issues businesses expected to face over the following year. Nationally, credit availability and cash flow again appear to be more important issues for African American-owned firms than for nonminority-owned firms. Nonminority-owned firms were especially worried about health care costs. Hispanic and other minority-owned firms were especially worried about general business conditions.

In the WSC, credit availability and cash flow were far more important issues for African American-owned and Hispanic-owned firms than for nonminority-owned firms. Almost six times as many African American-owned firms than nonminority-owned firms reported credit availability as the most important issue. In contrast, health care costs were a large concern for all types of firms in the WSC.

Table 5.5. Percentage of Firms Reporting Most Important Issues Affecting Them Over the Next 12 Months—USA

	All	Non-minority	African American	Hispanic	Other Races
Credit availability	5.9	5.5	20.5	5.3	4.3
Health care, health insurance	21.1	22.1	12.3	13.7	14.8
Taxes, tax policy	5.7	5.7	2.6	8.7	3.3
General U.S. business conditions	11.8	11.5	8.9	14.4	17.4
High interest rates	5.4	5.7	1.8	3.5	3.4
Costs of conducting business	3.3	3.3	3.8	3.8	3.6
Labor force problems	3.5	3.3	3.9	5.5	3.6
Profits, cash flow, expansion, sales	10.3	9.9	20.3	9.8	11.9
Number of observations (unweighted)	4,388	3,383	424	262	319

Source: See Table 5.1.

Table 5.6. Percentage of Firms Reporting Most Important Issues Affecting Them Over the Next 12 Months—WSC

	All	Non-minority	African American	Hispanic	Other Races
Credit availability	3.9	2.8	16.0	9.8	2.4
Health care, health insurance	22.1	22.6	23.8	19.3	19.5
Taxes, tax policy	7.7	8.3	0.0	2.5	12.2
General U.S. business conditions	9.4	10.0	7.8	6.3	7.1
High interest rates	4.1	4.8	5.1	0.9	0.0
Costs of conducting business	2.0	1.9	2.3	4.1	0.0
Labor force problems	6.0	5.1	5.8	7.0	13.9
Profits, cash flow, expansion, sales	8.6	8.4	15.1	10.3	4.6
Number of observations (unweighted)	488	328	42	76	42

Source: See Table 5.1.

Acute credit availability problems for minorities have been reported in surveys other than the NSSBF. In the Census Bureau's 1992 Characteristics of Business Owners (CBO) Survey, conducted by the Census Bureau, for example, when owners were asked to identify the impact of various issues on their firm's profitability, 27.0 percent of African American-owned firms reporting an answer indicated that lack of financial capital had a strong negative impact—compared to only 17.3 percent among nonminority male-owned firms. Hispanic-owned firms

and other minority-owned firms also reported higher percentages than nonminority male-owned firms—21.3 percent and 19.7 percent, respectively. Further, owners who had recently discontinued their business because it was unsuccessful were asked in the CBO survey to identify the reasons why. African American-owned firms, and to a lesser degree Hispanic-owned firms, other minority-owned firms, and women-owned firms, were much more likely than nonminority male-owned firms to report that the reason was due to lack of access to business or personal loans or credit. For unsuccessful firms that were discontinued, 7.3 percent of firms owned by nonminority males reported it was due to lack of access to business loans or credit compared to 15.5 percent for firms owned by African Americans, 8.8 percent for Hispanics, 6.1 percent for Other minorities, and 9.3 percent for women. Another 2.7 percent of nonminority males said it was due to lack of personal loans or credit compared to 8.4 percent for firms owned by African Americans, 5.8 percent for Hispanics, 6.4 percent for Other minorities, and 3.3 percent for women.¹¹⁹

A later study published by the U.S. Chamber of Commerce (2005) is also consistent with these findings from the 1993 NSSBF and the 1992 CBO.¹²⁰ The Chamber of Commerce survey was conducted in March and April 2005 and detailed the financing problems experienced by small business owners, 95 percent of whom had less than 100 employees. Over 1,000 business owners were interviewed. This survey showed that minority-owned businesses rely heavily on credit cards to fund their businesses; often do not apply for credit, even though they need it, for fear of being denied; and were especially likely to need working capital. In particular, as shown in Table 5.7, minority-owned firms report that availability of credit is their top problem. The biggest difference in responses between minorities and nonminority men and women was availability of credit: 19 percent of nonminority males report credit as their top problem compared with 54 percent for minority males. There was a 15 percentage point difference between minority women and nonminority women. In no other category is there more than an 11 percentage point difference for men or women.

¹¹⁹ Bureau of the Census (1997), Table 5a, p. 46, Table 1, p. 21.

¹²⁰ Although the CBO is part of the Economic Census, it was not published in 1997. In 2002, the name was changed to the Survey of Business Owners (SBO). Unfortunately, questions relating to the importance of access to financial loans and credit to business success were not included in the SBO.

Table 5.7. Types of Problems Facing Your Business, by Race and Gender

	Non-minority Male (%)	Non-minority Female (%)	Minority Male (%)	Minority Female (%)	African American (%)	Hispanic (%)	Asian/Pacific Islander (%)
Availability of credit	19	23	54	38	46	52	34
Rising health care costs	60	49	50	41	31	42	66
Excessive tax burden	49	46	48	42	46	34	51
Lack of qualified workers	37	28	33	17	22	20	34
Rising energy costs	37	35	36	35	29	34	44
Rising costs of materials	44	47	36	47	53	42	32
Legal reform	21	15	15	12	11	10	17
Number of firms	415	356	80	81	55	50	41

Source: U.S. Chamber of Commerce (2005), p. 55.

Notes: (1) Percentages may total to more than 100% because respondents had the option to select multiple choices.

(2) "Minority" also includes 14 firms owned by Native Americans.

In summary, African American-owned and Hispanic-owned firms in particular reported that they had problems with the availability of credit in the past and expected that such difficulties would continue into the future. Whether or not these perceptions reflect actual discrimination can be tested in the econometric analyses to follow.

E. Differences in Loan Denial Rates by Race, Ethnicity or Gender

Evidence presented to this point indicates that minority-owned firms are more likely to be denied loans and report that their lack of access to credit significantly impairs their business. Can these differences be explained by such things as differences in size, creditworthiness, location, or other factors as some have suggested in the literature on discrimination in mortgage lending (Horne, 1994; Bauer and Cromwell, 1994; and Yezer, Phillips, and Trost, 1994)? To address this question, we turn to an econometric examination of whether the loan requests made by minority-owned firms are more likely to be denied, holding constant important differences among firms.

In Table 5.8 and Table 5.9, we report the results from a series of loan denial Probit regressions of the form specified in Equation (1) using data from the 1993 NSSBF for the U.S. and the WSC

division.¹²¹ As indicated earlier, the 1993-2003 datasets have the particular advantage that they include information that can be used to proxy an applicant's creditworthiness. We report estimates from these models that can be interpreted as changes or differences in loan denial probabilities depending on the type of variables considered. For indicator variables, such as race, ethnicity, and gender indicators, estimates show differences in loan denial probabilities between the indicated group and the base group.¹²² In Column (1) of Table 5.8 (in which the regression model contains only race and gender indicators), the estimated coefficient of 0.443 on the African American indicator can be interpreted as indicating that the denial rate for African American-owned businesses is 44.3 percentage points higher than that for nonminority male-owned firms.¹²³

The remainder of Table 5.8 includes additional explanatory variables to hold constant differences in the characteristics of firms that may vary by race, ethnicity or gender.¹²⁴ In Column (2) a number of controls are included that distinguish the creditworthiness of the firm and the owner. Many are statistically significant on a two-tailed test at conventional levels of significance with the expected signs. For instance, having been bankrupt or had legal judgments against the firm or owner raises the probability of denial; stronger sales lower this probability. Even after controlling for these differences in creditworthiness, however, African American-owned firms remain 28.8 percentage points more likely than nonminority-owned firms to have their loan request denied.

The models reported in Columns (3) through (5) of Table 5.8 control for an array of additional characteristics of firms. Column (3) adds 39 additional characteristics of the firm and the loan application, including such factors as level of employment, change in employment, the size of the loan request, and the use of the loan. Column (4) includes variables to control for differences across regions of the country and major industry groups. Column (5) adds variables indicating

¹²¹ Firms owned 50-50 by minorities and non-minorities are excluded from this and all subsequent analyses, as are nonminority firms owned 50-50 by women and men.

¹²² For "continuous" variables, such as profits and sales, estimates can be thought of as changes in loan denial probability when the continuous variable changes by one unit. For example, in Column (2) of Table 5.8, the estimated coefficient of -0.003 on owner's years of experience indicates that one additional year of owner's experience is related to -0.3 percentage point reduction in loan denial rate.

¹²³ This estimate largely replicates the raw difference in denial rates between African American-owned and nonminority-owned businesses reported in Table 5.1. The raw differential observed there ($0.659 - 0.269 = 0.39$) differs slightly from the 0.443 differential reported here because this specification also controls for whether the business is owned by a White Female and because the regressions are unweighted whereas the descriptive statistics are weighted using the sample weights. When a full set of explanatory control variables are included, the unweighted estimates are insignificantly different from the weighted estimates, hence in Table 5.8 and subsequent tables we report only unweighted estimates.

¹²⁴ In preliminary analyses, these models were also estimated separately, focusing specifically on the differences in coefficient estimates between nonminorities and African Americans. The F-Test conducted to determine whether parameter estimates were the same for African Americans and nonminorities rejected this null hypothesis. Next, the estimates obtained by estimating the model separately by race were used to conduct an Oaxaca (1973) decomposition. The results from this analysis were similar to those obtained by restricting the coefficients to be the same between African Americans and nonminorities and using the coefficient on the African American indicator variable to measure the gap between groups. In this chapter, all the results are reported in this simpler format for ease of exposition and interpretation.

the month and year in which the loan was requested and the type of financial institution to which the firm applied.¹²⁵ In total, these three columns add 176 variables to the more parsimonious specification reported in Column (2).¹²⁶ Nevertheless, the estimated disadvantage experienced by African American-owned firms in obtaining credit remains large and statistically significant. The estimate from each of the three additional columns indicates that African American-owned firms are 24 percentage points more likely than nonminority male-owned firms to have their loan application denied even after controlling for the multitude of factors we have taken into consideration.

The results also indicate that Asians/Pacific Islanders had significantly higher denial rates than nonminority males—12 percentage points. There is little evidence in the 1993 national data, however, that denial rates for firms owned by Native Americans or Hispanics were significantly different from the denial rates of firms owned by nonminorities; or that denial rates for firms owned by nonminority women were significantly different from those for firms owned by nonminority men.¹²⁷

In Table 5.9, we see results for the WSC division similar to those reported in Table 5.8 for the nation as a whole. The table shows that the results of our loan denial model in the WSC, which includes Austin, the balance of the State of Texas and a three-state surrounding area, are not substantially different from the nationwide results reported in Table 5.8. The indicator variable for the WSC division is insignificantly different from zero in all but one specification, and the interaction terms between race/ethnicity/gender and the WSC division are insignificantly different from zero in all cases.

¹²⁵ Approximately four out of five (80.5%) of the firms who required a loan applied to a commercial bank. Overall, seventeen different types of financial institutions were tabulated, although only the following accounted for more than 1% of the (weighted) total: Finance Companies (4.9%); Savings Banks (2.5%); Savings & Loans (2.3%); Leasing Companies (2.1%); and Credit Unions (2.0%).

¹²⁶ One piece of information to which we did not have access in the 1993 NSSBF or the 1998 SSBF because of confidentiality concerns was each firm's credit rating. A working paper by Cavalluzzo, Cavalluzzo, and Wolken (2002) was able to incorporate Dun & Bradstreet credit ratings for each firm because the authors' connection to the Federal Reserve Board enabled them to access the confidential firm identifiers. They added these credit rating variables in a model comparable to that reported here and found the results insensitive to the inclusion. The 2003 SSBF includes Dun & Bradstreet credit ratings for each firm. Below, we discuss the impact of incorporating them into a model similar to that presented in Table 5.8 (see Tables 5.27 and 5.28).

¹²⁷ It would be a mistake to interpret a lack of statistical significance (as opposed to substantive significance) in any of the tables in Chapter V, or elsewhere in this Study, as a lack of adverse disparity. While tests for statistical significance are very useful for assessing whether chance can explain disparities that we observe, they do have important limitations. First, the fact that a disparity is not statistically significant does not mean that it *is* due to chance. It merely means that we cannot rule out chance. Second, there are circumstances under which tests for statistical significance are not helpful for distinguishing disparities due to chance from disparities due to other reasons (*e.g.*, discrimination). In the particular statistical application presented in this chapter, the chance that a test for statistical significance will incorrectly attribute to chance disparities that are due to discrimination becomes greater when relatively small sample sizes are present for an affected group.

Table 5.8. Determinants of Loan Denial Rates—USA

	(1)	(2)	(3)	(4)	(5)
African American	0.443 (11.21)	0.288 (6.84)	0.237 (5.57)	0.235 (5.22)	0.241 (5.13)
Asian/Pacific Islander	0.225 (4.21)	0.171 (3.18)	0.140 (2.56)	0.121 (2.15)	0.119 (2.07)
Native American	-0.016 (0.11)	-0.141 (1.06)	-0.097 (0.71)	-0.052 (0.35)	-0.083 (0.56)
Hispanic	0.129 (2.62)	0.070 (1.42)	0.067 (1.36)	0.035 (0.70)	0.031 (0.63)
Nonminority Female	0.088 (2.65)	0.048 (1.45)	0.047 (1.45)	0.036 (1.06)	0.033 (0.94)
Judgments		0.143 (2.84)	0.129 (2.56)	0.124 (2.40)	0.121 (2.29)
Firm delinquent		0.176 (6.50)	0.178 (6.43)	0.195 (6.77)	0.208 (7.00)
Personally delinquent		0.161 (4.45)	0.128 (3.56)	0.124 (3.38)	0.119 (3.17)
Bankrupt past 7 years		0.208 (3.11)	0.179 (2.68)	0.162 (2.37)	0.167 (2.33)
\$1992 profits (*10 ⁸)		-0.000 (0.89)	-0.000 (1.64)	-0.000 (1.78)	-0.000 (1.83)
\$1992 sales (*10 ⁸)		-0.000 (3.08)	-0.000 (3.38)	-0.000 (3.28)	-0.000 (3.38)
\$1992 assets (*10 ⁸)		0.000 (0.51)	0.000 (0.60)	0.000 (0.40)	0.000 (0.37)
\$1992 liabilities (*10 ⁸)		0.000 (0.61)	0.000 (1.11)	0.000 (1.04)	0.000 (1.17)
Owner years of experience		-0.003 (2.59)	-0.001 (1.30)	-0.002 (1.55)	-0.002 (1.72)
Owner share of business		0.001 (1.91)	0.000 (0.71)	0.000 (0.26)	0.000 (0.30)
Owner Education (5 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (13 variables)	No	No	Yes	Yes	Yes
Region (8 indicator variables)	No	No	No	Yes	Yes
Industry (60 indicator variables)	No	No	No	Yes	Yes
Month/Year of Application (51 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (16 indicator vars.)	No	No	No	No	Yes
N	2,007	2,007	2,006	1,985	1,973
Pseudo R ²	.0608	.1412	.2276	.2539	.2725
Chi ²	143.6	333.4	537.3	595.4	635.8
Log likelihood	-1108.8	-1013.8	-911.6	-874.8	-848.7

Source: See Table 5.1.

Notes: (1) Reported estimates are derivatives from Probit models, t-statistics are in parentheses. (2) “Other firm characteristics” include variables indicating whether the firm had a line of credit, 1990 employment, firm age, metropolitan area, a new firm since 1990, legal form of organization (sole proprietorship, partnership, S-corporation, or C-corporation), 1990-1992 employment change, existing long run relation with lender, geographic scope of market (local, regional, national or international), the value of the firm’s inventory, the level of wages and salaries paid to workers, the firm’s cash holdings, and the value of land held by the firm. (3) “Characteristics of the loan” include the size of the loan applied for, a variable indicating whether the loan was backed by real estate, and twelve variables indicating the intended use of the loan.

Table 5.9. Determinants of Loan Denial Rates—WSC division

	(1)	(2)	(3)	(4)	(5)
African American	0.434 (10.33)	0.289 (6.55)	0.236 (5.3)	0.238 (5.04)	0.242 (4.89)
Asian/Pacific Islander	0.206 (3.60)	0.157 (2.72)	0.115 (2.00)	0.091 (1.55)	0.094 (1.56)
Native American	-0.083 (0.47)	-0.132 (0.76)	-0.105 (0.59)	-0.059 (0.29)	-0.108 (0.53)
Hispanic	0.154 (2.64)	0.095 (1.64)	0.061 (1.06)	0.028 (0.49)	0.024 (0.42)
Nonminority Female	0.082 (2.33)	0.047 (1.33)	0.042 (1.20)	0.029 (0.82)	0.019 (0.52)
African American*WSC	0.071 (0.61)	-0.008 (0.07)	0.003 (0.03)	-0.011 (0.10)	0.007 (0.06)
Asian/Pacific Islander*WSC	0.128 (0.83)	0.071 (0.50)	0.167 (1.04)	0.213 (1.26)	0.188 (1.10)
Native American*WSC	0.243 (0.67)	-0.053 (0.17)	0.017 (0.05)	0.035 (0.11)	0.105 (0.27)
Hispanic*WSC	-0.068 (0.70)	-0.087 (0.91)	0.009 (0.09)	0.037 (0.33)	0.047 (0.40)
Nonminority female*WSC	0.045 (0.44)	0.002 (0.02)	0.047 (0.46)	0.062 (0.58)	0.143 (1.21)
WSC division	-0.003 (0.07)	0.027 (0.61)	0.013 (0.30)	0.126 (2.42)	0.033 (0.63)
Creditworthiness Controls (4 variables)	No	Yes	Yes	Yes	Yes
Owner Education (5 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (13 variables)	No	No	Yes	Yes	Yes
Geographic Division (7 indicator variables)	No	No	No	Yes	Yes
Industry (60 indicator variables)	No	No	No	Yes	Yes
Month/Year of Application (51 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (16 indicator vars.)	No	No	No	No	Yes
N	2007	2,007	2,006	1,985	1,973
Pseudo R ²	.0618	.1419	.2285	.2547	.2736
Chi ²	145.8	334.95	539.3	597.3	638.3
Log likelihood	-1107.5	-1013.1	-910.6	-873.8	-847.5

Source: See Table 5.8.

Note: Creditworthiness controls are those used in Table 5.8 above.

Although the results provided so far strongly indicate that financial institutions treat African American-owned and nonminority male-owned small businesses differently in lending, other considerations may limit our ability to interpret this finding as discrimination. Of perhaps greatest concern is the possibility that we may not have adequately controlled for differences in the creditworthiness of firms. If African American-owned firms are less creditworthy and we have failed to sufficiently capture those differences, then we would be inadvertently attributing the racial difference in loan denial rates to discrimination. On the other hand, if financial institutions discriminate against African American-owned firms, then the greater likelihood of denial for African Americans in earlier years is likely to hurt the performance of these firms and appear to make them look less creditworthy. Therefore, controlling for creditworthiness will likely understate the presence of discrimination.

As a check on the foregoing results, therefore, our first approach was to identify the types of information that financial institutions collect in order to evaluate a loan application and compare that with the information available to us in the NSSBF. First, a selection of small business loan applications was collected from various banks. An Internet search of web sites that provide general business advice to small firms was also conducted. Such sites typically include descriptions of the loan application process and list the kinds of information typically requested of applicants.¹²⁸

Bank loan applications typically request detailed information about both the firm and its owner(s). Regarding the firm, banks typically request information on: (a) type of business, (b) years in business, (c) number of full-time employees, (d) annual sales, (e) organization type (corporation or proprietorship), (f) owner share(s), (g) assets and liabilities, (h) whether the business is a party to any lawsuit, and (i) whether any back taxes are owed. Regarding the owner's personal finances, banks typically ask for: (a) assets and liabilities, (b) sources and levels of income, and (c) whether the owner has any contingent liabilities. Some applications ask explicitly if the firm qualifies as a minority-owned enterprise for the purposes of certain government loan guarantee programs. The race of the applicant, however, would be readily identifiable even in the absence of such a question since most of these loans would be originated through face-to-face contact with a representative of the financial institution.

These criteria seem to match quite closely the information available in the 1993 NSSBF. The particular strength of the NSSBF is the detail available on the firm, which covers much of the information typically requested on loan application forms. The only shortcoming that we have identified in the 1993 NSSBF data is that less detail is available on the finances of the owner of the firm, as opposed to the firm itself.¹²⁹ Although our creditworthiness measures enable us to identify those owners who have had serious financial problems (like being delinquent on personal obligations), we have no direct information regarding the owner's assets, liabilities, and income (as opposed to those of the firm). These factors would be necessary to identify whether the business owner has sufficient personal resources to draw upon should the business encounter

¹²⁸ An example of a typical application form is presented as Appendix B in Blanchflower, Levine, and Zimmerman (2003).

¹²⁹ This is remedied in the 1998 SSBF and the 2003 SSBF, discussed below, both of which contain information on the owner's home equity, and personal net worth excluding home equity and business equity.

difficulties and to determine the personal collateral available should the firm default on its obligation. We do have measures of the owner's human capital in the form of education and experience, which likely capture at least some of the differential in available personal wealth across firm owners. Nevertheless, our potentially incomplete characterization of the business owner's personal financial condition in the 1993 NSSBF dataset may introduce a bias into our analysis if African American business owners have fewer resources than nonminority business owners. As we will see below, however, and as noted in the previous footnote, this deficiency is rectified in the 1998 and 2003 SSBF datasets, with little change in the main findings.

To assess the potential impact of this problem on our results, we separately examined groups of firms who differ in the degree to which personal finances should influence the loan decision and compare the estimated disadvantage experienced by African American-owned firms in different groups. First, we examine proprietorships and partnerships separately from corporations since owners of incorporated businesses are at least somewhat shielded from incurring the costs of a failed business. Second, we divide firms according to size.¹³⁰ Both larger small businesses and those that have been in existence for some time are more likely to rely on the business's funds, rather than the owner's, to repay its obligations. Third, we consider firms that have applied for loans to obtain working capital separately from those firms that seek funds for other purposes (mainly to purchase vehicles, machinery and equipment, and buildings or land). Loans made for one of these other purposes are at least partially collateralized because the financial institution could sell them, albeit at a potentially somewhat reduced rate, should the small business default.¹³¹

In order to determine whether the findings for the WSC division were different from those for the nation as a whole, in the second column of Table 5.10 we also report the coefficient and t-statistics on an interaction term between the WSC division and African American ownership. In no case was the estimated coefficient on this interaction significant, implying that the national results also apply to the WSC, hence we do not discuss it further below, as the national results are also representative for the WSC.

Results from these analyses provide no indication that omitting the owner's personal wealth significantly biases the results presented above in Tables 5.8 and 5.9. Estimates presented in row numbers 1 through 8 of Table 5.10 indicate that African American-owned small businesses are significantly more likely to have their loan applications rejected regardless of the category of firm considered. In particular, when samples are restricted to corporations, larger firms, and

¹³⁰ As reported earlier, the mean and median size of firms is 5.5 and 31.6 full-time equivalent workers, respectively. Fourteen percent of firms have one or fewer employees and 27 percent have two or fewer employees. In the WSC, the mean and median size of firms is 5.0 and 30.2 full-time equivalent workers, respectively. Ten percent of firms have one or fewer employees and 30 percent have two or fewer employees.

¹³¹ As indicated earlier, greater personal wealth may improve a small business's chances of obtaining credit because it provides collateral should the loan go bad and because wealthy owners can use their own resources to weather bad times, improving the likelihood of repayment. Our separate analysis of corporations and proprietorships and of large and small firms does not account for this second reason because corporations and large businesses may still need to draw on the owner's personal wealth to help it survive short-term shocks. Businesses that have been in existence for several years, however, are less likely to experience these shocks, making them less likely to require infusions from the owner's personal wealth. A loan used to purchase equipment that can be sold if the firm defaults similarly insulates the bank from the need to seek repayment directly from the owner.

firms seeking credit for uses other than working capital, African American-owned firms are 21, 24, and 18 percentage points more likely, respectively, to have their loan application rejected even though personal resources should be less important in these categories. Moreover, in each group where there are two types of firms (large and small, etc.), the estimates for the two types of firms are not significantly different from each other.

Another issue is whether the racial differences in loan denial rates among firms with similar characteristics can be attributable to differences in the geographic location of African American- and nonminority-owned firms. If, for example, African American-owned firms are more likely to be located in the central city, and a central city location is negatively correlated with profitability and the ability to repay debt, then financial institutions may be acting optimally in rejecting the loan applications of African American-owned firms at a higher rate. As indicated earlier, this type of behavior is labeled “statistical discrimination.” In the subsequent text and tables, we present a limited analysis to address whether or not this type of behavior takes place.¹³²

To identify whether lenders’ behavior is consistent with this hypothesis, we distinguish those firms that self-classified their sales market as being local rather than regional, national, or international. A central city location should have a greater impact on future profit expectations for those firms that operate on a local level. If minority-owned firms are more likely to locate in the central city, racial differences in loan approval rates should be greater in the firms that sell in the local market area. The results of this test, reported in row numbers 9 and 10 of Table 5.10, reject the hypothesis that differences in loan denial rates are attributable to different propensities to locate in the center of a city. Estimates indicate that African American-owned firms that sell to the local market are 13 percentage points more likely to have their loan applications denied compared to a 23 percent excess denial rate for firms selling primarily to regional, national, or international markets.

We also estimate models that address a potential weakness in the specific functional form with which we control for differences in credit history across firms. As shown in Tables 5.1 and 5.2, African American-owned firms are considerably more likely to have had troubles in the past in the form of judgments against them, late payments by the firm or its owner, or past bankruptcies. The model specifications reported in Tables 5.8 and 5.9 implicitly assume that these past problems are additive in their effect on loan denials and one might suspect the marginal impact would rise as past problems rise. Therefore, in the final three rows of Table 5.10, we separated firms by the number of past problems experienced. In Rows 11 through 13, we restricted the sample to those firms that have never had any past credit problems, those firms that reported one problem only, and those firms that reported more than one of these problems, respectively. The results indicate that even African American-owned firms with clean credit histories are at a significant disadvantage in getting their loans approved, holding constant their other characteristics. In fact, the estimated differential in loan approval rates between African American and nonminority-owned firms is statistically indistinguishable within each of these

¹³² A strong test to distinguish between statistical discrimination and “Becker-Type” discrimination (referring to the standard economic model of discrimination first expounded by University of Chicago economist Gary Becker) would require a tremendous amount of detail about the specific location of the firm, characteristics of its surrounding area, characteristics of neighboring firms, and the like, which were unavailable to us. As indicated earlier, both forms of discrimination are illegal and this chapter applies a definition that incorporates both.

groups. Asian/Pacific Islander-owned firms and nonminority female-owned firms with clean credit histories, are also at a significant disadvantage relative to nonminority-male owned firms.

Table 5.10. Alternative Models of Loan Denials

Specification	African American	African American* WSC	Asian	Hispanic	Non-minority Female	Sample Size
All	0.236 (5.30)	0.003 (0.03)	0.115 (2.00)	0.061 (1.06)	0.042 (1.20)	2,006
<i>Organization Type</i>						
1) Proprietorships and Partnerships	0.266 (3.15)	0.038 (0.19)	0.240 (2.10)	-0.013 (0.13)	-0.013 (0.18)	536
2) Corporations	0.209 (3.95)	-0.009 (0.06)	0.071 (1.05)	0.095 (1.31)	0.062 (1.53)	1,457
<i>Age of Firm</i>						
3) 12 Years or Under	0.256 (4.22)	0.165 (0.25)	0.042 (2.12)	0.008 (0.10)	0.016 (0.32)	1,074
4) Over 12 Years	0.194 (2.92)	0.002 (0.23)	0.035 (0.03)	0.114 (1.41)	0.094 (1.86)	926
<i>Firm Size</i>						
5) Fewer than 10 Employees	0.226 (3.65)	0.107 (0.53)	0.093 (1.27)	-0.009 (0.12)	-0.019 (0.38)	868
6) 10 or More Employees	0.242 (3.44)	0.119 (0.73)	-0.105 (1.37)	0.141 (1.61)	0.108 (2.16)	1,132
<i>Intended Use of Loan</i>						
7) Working Capital	0.258 (4.65)	0.093 (0.48)	0.087 (1.17)	0.046 (0.6)	0.047 (0.97)	1,086
8) Other Use	0.176 (2.30)	-0.048 (0.35)	0.164 (1.79)	0.086 (0.99)	0.040 (0.83)	913
<i>Scope of Sales Market</i>						
9) Local	0.125 (1.79)	0.350 (1.72)	0.127 (1.63)	0.011 (0.15)	0.036 (0.72)	875
10) Regional, National, or International	0.229 (5.36)	-0.062 (0.97)	0.059 (1.09)	0.086 (1.41)	0.031 (1.07)	1,129
<i>Creditworthiness</i>						
11) No Past Problems	0.269 (4.64)	-0.123 (1.54)	0.150 (2.57)	0.046 (0.83)	0.079 (2.33)	1,386
12) One Past Problem	0.280 (2.69)	-0.089 (0.36)	-0.094 (0.54)	0.182 (1.10)	0.007 (0.07)	376
13) More Than One Problem	0.263 (2.39)	0.003 (0.03)	0.271 (1.74)	-0.022 (0.11)	-0.178 (1.15)	222

Source: See Table 5.1.

Notes: (1) Reported estimates are derivatives from Probit models, t-statistics are in parentheses. (2) Each line of this table represents a separate regression with the same control variables as Column 3 of Table 5.8. (3) The dependent variable in all specifications represents an indicator for whether or not a loan application was denied. (4) Control for WSC also included.

Finally, we considered whether African American-owned firms are treated differently from nonminority-owned firms when requesting credit from other sources. The source of credit we examined is credit cards. Such an analysis provides a unique advantage because credit card applications are more likely to be filled out and mailed in, so it is more likely that the race of the applicant is unknown to the financial institution, at least in the case of African American-owned firms and Native American-owned firms, where surname is unlikely to provide any signal about minority status. On the other hand, for Asian/Pacific Islander and Hispanic applicants, it is possible that surname does provide such a signal, albeit a somewhat noisy one. The 1993 NSSBF asked respondents whether they used either a business or personal credit card for business purposes. Although our analysis of use of credit cards does not condition on application, a finding that African American- and nonminority-owned small businesses are equally likely to use credit cards may still provide evidence supporting discrimination in small-business lending. In fact, if financial institutions discriminate against African Americans in providing small business loans, we may even expect to see African Americans use credit cards more often than nonminorities since they have fewer alternatives. Even though many institutions may offer both types of credit, they may only be aware of the race of the applicant in a small business loan.¹³³

In Tables 5.11 and 5.12, we examine the probability that a firm uses either a business credit card (Row 1) or a personal credit card (Row 2) to finance business expenses holding constant other differences across firms.¹³⁴ There is no evidence, either for the U.S. as a whole or for the WSC, that African American-owned firms or Native American-owned firms are less likely to access either business or personal credit cards for business expenses. In fact, there is some evidence in the WSC that African Americans are *more* likely to access business credit cards. On the other hand, there is evidence both in the WSC and the nation as a whole that Asian/Pacific Islander-owned firms and Hispanic-owned firms are less likely to access business credit cards.¹³⁵

¹³³ It appears that race may also rarely be known to those institutions that issue credit ratings. As we mentioned above, Cavalluzzo, Cavalluzzo, and Wolken (2002) show that Dun & Bradstreet Credit Ratings are not helpful in explaining racial disparities in loan denials. Although we are not privy to Dun & Bradstreet's methodology for establishing its credit ratings, we do know from long experience that indicators of ownership by race are incomplete in Dun & Bradstreet's master business identifier file. Indeed, this is the reason why NERA's availability estimation methodology requires us to create a master directory of disadvantaged, minority- and women-owned businesses for merging with the Dun & Bradstreet data.

¹³⁴ On average, 29 percent of all firms use business credit cards and 41 percent use personal credit cards for business use; these levels vary only modestly by race and ethnicity. In the WSC, the figures are 28 percent and 37 percent, respectively.

¹³⁵ We also had information available on the maximum amount that could be billed to these accounts and found no significant differences by race in a regression that modeled the amount that could be charged. Nor were any racial differences observed when we modeled the typical balance remaining on these cards at the end of a typical month.

Table 5.11. Models of Credit Card Use

Specification	African American	Asian/ Pacific Islander	Native American	Hispanic	Non-minority Female	Sample Size
1) Business Credit Card	0.035 (1.35)	-0.096 (3.23)	0.085 (1)	0.024 (0.79)	0.018 (0.83)	4,633
2) Personal Credit Card	0.019 (0.74)	-0.019 (0.63)	0.019 (0.23)	-0.042 (1.4)	0.028 (1.28)	4,633

Source: See Table 5.1.

Notes: (1) Reported estimates are derivatives from Probit models, t-statistics are in parentheses. (2) Each line of this table represents a separate regression with the same control variables as Column 3 of Table 5.8 but excluding the loan characteristics. (3) The dependent variable indicates whether the firm used business or personal credit cards to finance business expenses. (4) In all specifications, the sample size is all firms. (5) Other races are excluded due to sample size limitations.

Table 5.12. Models of Credit Card Use–WSC

Specification	African American	Asian/ Pacific Islander	Native American	Hispanic	Non-minority Female	Sample Size
1) Business Credit Card	0.210 (2.32)	-0.214 (2.74)	0.021 (0.31)	-0.028 (0.44)	0.018 (0.83)	514
2) Personal Credit Card	0.019 (0.22)	-0.043 (0.49)	-0.172 (2.65)	-0.085 (1.28)	0.028 (1.28)	514

Source: See Table 5.11.

Notes: See Table 5.11. Control for WSC included.

F. Differences in Interest Rates Charged on Approved Loans

Although most of our analysis has addressed whether minority- and nonminority-owned firms are treated equally in terms of their probability of loan denial, another way that differential treatment may emerge is through the interest rate charged for approved loans. Discrimination may be apparent if banks approve loans to equally creditworthy minority- and nonminority-owned firms, but charge the minority-owned firms a higher interest rate. Therefore, we estimated model specifications analogous to those reported previously for loan denials, but now the dependent variable represents the interest rate charged for firms whose loans were approved and the set of explanatory variables includes characteristics of the loan. More formally, the model we estimated takes the form:

$$(2) \quad I_i = \beta_0 + \beta_1 CW_i + \beta_2 X_i + \beta_3 R_i + \beta_4 LC_i + \varepsilon_i,$$

where I represents the interest rate charged on the loan, LC represents characteristics of the loan (see the notes to Table 5.8 for a full list of the variables included in this set), ε_i is a term capturing random factors, and all other notations are the same as in equation (1).

An important consideration is whether the interest rate may be treated as exogenous, as our reduced form model assumes. In the context of small business loans, in which it is possible that the loan terms may be negotiated in the determination process, this assumption may not be valid. As such, a model that simultaneously estimates the interest rate and the loan decision might be appropriate, except that the interest rate that would be charged to firms whose loans were denied is not available in our data. Alternatively, one could estimate an interest rate model alone for those firms whose loan was approved, adjusting for the potential bias brought about by sample selection. To properly identify such a model, however, a variable is required that is linked to the loan denial decision, but unrelated to the level of interest charged on approved loans; no such variable exists in the data.

Nevertheless, one would expect these considerations to impose a downward bias on the estimated differential in interest rates charged on loans to African American-owned firms. Those firms whose loans were rejected would have been charged higher interest rates than those approved. Since African American-owned businesses were considerably more likely to be rejected holding constant differences in creditworthiness, one would expect any differential in interest rate to be even greater if those firms were included in the sample. We overlook this implication in the results reported below, but its impact should be kept in mind.

The results obtained from estimating equation (2) are reported in Row 1 of Table 5.13, which includes the complete set of control variables comparable to those in Column 5 of Table 5.8. Estimates indicated that African American-owned firms pay rates of interest that are roughly one percent higher than similarly situated nonminority-owned firms. Row 2 shows that even African American-owned firms with good credit histories are charged higher interest rates relative to nonminority-owned firms.¹³⁶

The remainder of the table presents similar specification checks to those reported in Table 5.10. Recall that most of these models identify firms for which the firm's own history is likely to be a more important contributor to its creditworthiness. The specifications by sales market are designed to distinguish the impact of central city location. Unfortunately, sample sizes are smaller in these specifications and reduce the power of the analysis. Nevertheless, we still find that regardless of organization type and firm age, African American-owned firms face statistically significantly higher interest rates. Overall, the evidence presented indicates that African Americans, and to a lesser extent Hispanics and Asian/Pacific Islanders, do face disadvantages in the market for small business credit that does not appear to be attributable to differences in geography or creditworthiness.

Table 5.14 shows results for the WSC. Findings are comparable to those for the nation as a whole.

¹³⁶ Estimates from firms that have had past credit problems are not presented since the higher likelihood of their being denied credit restricts the size of the sample and limits the ability to provide a powerful test of the interest rates charged if they are approved.

Table 5.13. Models of Interest Rate Charged —USA

Specification	African American	Asian/ Pacific Islander	Native American	Hispanic	Non-minority Female	Sample Size
1) All loans (controls as in Column 5, Table 5.8)	1.034 (3.72)	0.413 (1.37)	-0.427 (0.63)	0.517 (1.97)	0.025 (0.14)	1,454
<i>Creditworthiness</i>						
2) No credit problems	1.187 (3.27)	0.485 (1.33)	0.910 (1.07)	0.435 (1.48)	0.129 (0.66)	1,137
<i>Organization Type</i>						
3) Proprietorships and Partnerships	1.735 (2.57)	0.826 (1.03)	2.589 (0.90)	1.008 (1.74)	-0.239 (0.53)	364
4) Corporations	0.660 (2.04)	0.359 (1.07)	-0.585 (0.86)	0.491 (1.53)	0.127 (0.66)	1,090
<i>1993 Firm Size</i>						
5) Fewer than 10 Employees	1.200 (2.58)	-0.247 (0.41)	-0.010 (0.01)	0.783 (1.75)	-0.311 (1.02)	574
6) 10 or More Employees	0.450 (1.15)	0.446 (1.21)	-0.197 (0.25)	0.515 (1.37)	0.164 (0.77)	880
<i>Scope of Sales Market</i>						
7) Local	0.751 (1.55)	-0.073 (0.13)	1.773 (1.12)	0.805 (2.05)	0.324 (1.08)	633
8) Regional, National, or International	1.544 (4.26)	1.185 (2.93)	-1.368 (1.85)	0.392 (0.96)	-0.163 (0.73)	821

Source: See Table 5.1.

Notes: (1) Reported estimates are Ordinary Least Squares (OLS) coefficients, t-statistics in parentheses. (2) Each line of this table represents a separate regression with all of the control variables as Column 5 of Table 5.8 (except where specified) as well as: an indicator variable for whether the loan request was for a fixed interest rate loan, the length of the loan, the size of the loan, whether the loan was guaranteed, whether the loan was secured by collateral, and 7 variables identifying the type of collateral used if the loan was secured. (3) The sample consists of firms that had applied for a loan and had their application approved. (4) “No credit problems” means that neither the firm nor the owner had been delinquent on payments over 60 days, no judgments against the owner for the preceding 3 years, and the owner had not been bankrupt in the preceding 7 years.

Table 5.14. Models of Interest Rate Charged—WSC

Specification	African American	African American * WSC	Asian/Pacific Islander	Native American	Hispanic	Non-minority Female	Sample Size
1) All loans (controls as in column 5, Table 5.8)	0.853 (2.92)	1.467 (1.73)	0.372 (1.18)	0.570 (0.73)	0.507 (1.61)	-0.027 (0.15)	1,454
<i>Creditworthiness</i>							
2) No credit problems	0.970 (2.51)	1.812 (1.72)	0.508 (1.36)	0.922 (1.08)	0.431 (1.22)	0.109 (0.53)	1,137
<i>Organization Type</i>							
3) Proprietorships and Partnerships	1.572 (2.05)	0.706 (0.46)	0.653 (0.77)	2.730 (0.94)	0.747 (1.00)	-0.441 (0.93)	364
4) Corporations	0.549 (1.65)	1.409 (1.07)	0.436 (1.23)	0.573 (0.71)	0.634 (1.73)	0.091 (0.46)	1,090
<i>Firm Size</i>							
5) Fewer than 10 Employees	0.994 (2.03)	1.345 (0.97)	-0.302 (0.49)	3.199 (1.74)	0.906 (1.65)	-0.345 (1.09)	574
6) 10 or More Employees	0.238 (0.58)	1.858 (1.57)	0.547 (1.37)	-0.100 (0.13)	0.638 (1.52)	0.070 (0.31)	880
<i>Scope of Sales Market</i>							
7) Local	0.502 (0.98)	2.208 (1.54)	-0.165 (0.28)	1.650 (1.04)	0.540 (1.14)	0.279 (0.88)	633
8) Regional, National, or International	1.442 (3.77)	0.776 (0.69)	1.162 (2.73)	-0.567 (0.63)	0.701 (1.42)	-0.232 (0.99)	821

Source: See Table 5.1

Notes: See Table 5.13.

G. Loan Approval Rates and Access to Credit

The results presented so far may be biased toward finding too small a disparity between nonminority- and African American-owned firms because those minority-owned firms that actually apply for credit may represent a selected sample of the most creditworthy. More marginal minority-owned firms whose loans may have been accepted had they been owned by nonminorities may not even be among the pool of loan applicants. First, these firms may have gone out of business or may not have had the opportunity to commence operations because of their inability to obtain capital. Second, some existing firms may have chosen not to apply for credit because they were afraid their application would be rejected due to prejudice.

Although we have no direct evidence regarding the first proposition, data from the 1993 NSSBF provide some evidence for the second: African American- and Hispanic-owned firms are much more likely to report that they did not apply for a loan, even though they needed credit, because they thought they would be rejected. Table 5.15 reports estimates from Probit models in which the dependent variable is an indicator variable representing failure to apply for a loan fearing denial for all firms. The first row presents racial differences without controlling for any other

characteristics of firms, and the results indicate that African American- and Hispanic-owned firms are 40 and 23 percentage points more likely than nonminority-owned firms to withhold an application fearing denial.

Of course, some of this difference may be attributable to differences in creditworthiness across firms since firms that are bad credit risks should be afraid that their loan would be denied. To adjust for this, the second row of Table 5.15 reports comparable models that control for differences in creditworthiness and other characteristics of firms. The results from this specification show that the greater fear of rejection among African American-owned and Hispanic-owned firms can partially be explained by these differences. Nevertheless, a gap of 26, 5, and 16 percentage points still exists for African American-owned, Asian/Pacific Islander-owned, and Hispanic-owned firms, respectively, relative to nonminority-owned firms with similar characteristics. In fact, when asked directly why they were afraid to apply for loans, African American-owned firms and Hispanic-owned were far more likely to report prejudice as the reason (19 percent and 8 percent, respectively, compared to less than 3 percent for nonminority-owned firms).¹³⁷ Results obtained in section (b) of Table 5.15 for the WSC division are very similar to those found for the nation as a whole. As section (c) of Table 5.15 shows, African American-owned firms in construction also appear to be fearful of applying because of the possibility of their application being turned down.¹³⁸

If these minority-owned firms had applied for credit and were rejected because of discrimination, estimates of racial disparities based only upon loan applicants (as in Tables 5.8 and 5.9) would be understated. The perception of prejudice among these firms, however, does not necessarily imply that selection bias is present. Those firms that failed to apply because they feared rejection may have had similar loan denial rates as other minority-owned firms with comparable levels of creditworthiness that did apply. If those firms chose to apply for a loan, differences by race in the combined denial rate of the actual and potential applicants would be the same as what we have estimated for the observed sample of applicants.

More formally, suppose that loan denial rates for equally creditworthy nonminority- and minority-owned firms that applied for credit are θ^W and θ^m , respectively; the measure of discrimination employed in the previous analysis is $\theta^m - \theta^W$. Now suppose that firms that are equally creditworthy, but chose not to apply for a loan because they feared rejection, would have been denied at the rates θ^W and ψ^m for nonminority- and minority-owned firms, respectively. Among the nonminority-owned firms, the denial rate is identical regardless of whether the firm chose to apply or not, conditional upon creditworthiness. Among minority-owned firms, however, those who were afraid to apply may have been denied at a higher rate (perhaps because of their greater propensity to locate in the central city or other factors that are related to their race, but unrelated to creditworthiness) compared with other minority-owned firms.

¹³⁷ Other reasons given, including “too little collateral,” “poor credit history,” and “poor balance sheet,” are comparable across groups. Firms could report more than one reason.

¹³⁸ It was not possible to report separate construction results in earlier tables because of small sample sizes.

Then, the correct representation of the disadvantage faced by minority-owned firms is $[\eta\theta^m + (1-\eta)\psi^m] - \theta^w$, where η represents the share of minority-owned firms desiring credit that submitted an application. Our earlier findings are biased if θ^m is not equal to ψ^m .

Table 5.15. Racial Differences in Failing to Apply for Loans Fearing Denial

Specification	African American	Asian/Pacific Islander	Native American	Hispanic	Non-minority Female
a) USA					
No Other Control Variables (n=4,637)	0.405 (16.65)	0.099 (3.61)	0.134 (1.72)	0.235 (8.28)	0.031 (1.54)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=4,633)	0.257 (10.02)	0.054 (1.98)	0.019 (0.27)	0.164 (5.69)	-0.008 (0.38)
b) WSC					
No Other Control Variables, except for WSC dummy and race*WSC interactions (n=4,637)	0.404 (15.80)	0.098 (3.34)	0.218 (2.24)	0.247 (7.47)	0.049 (2.26)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=4,633)	0.261 (9.78)	0.053 (1.83)	0.088 (0.97)	0.164 (4.96)	0.009 (0.45)
c) Construction					
No Other Control Variables (n=781)	0.350 (6.74)	0.109 (1.27)	-0.087 (0.54)	0.150 (2.22)	-0.007 (0.12)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=781)	0.181 (3.67)	0.064 (0.78)	-0.132 (1.00)	0.040 (0.65)	-0.063 (1.32)

Source: See Table 5.1.

Notes: (1) Reported estimates are Probit derivatives, t-statistics in parentheses. (2) Sample consists of all firms. (3) Dependent variable equals one if the firm said they did not apply for a loan fearing denial, zero otherwise.

One approach that is frequently employed to address such a problem is to estimate a “Heckman-correction” that would formally model the application process in conjunction with the loan outcome for those who applied. The difficulty with this methodology in the present context is that it is only correctly implemented when some variable is present that is correlated with a firm’s decision to apply for a loan, but is independent of the financial institution’s decision to approve or deny the request. Unfortunately, the NSSBF data do not appear to contain any variables that would satisfy these conditions, so we are unable to implement this methodology.¹³⁹

¹³⁹ The only variable that potentially could meet these conditions in the NSSBF data is the distance between a firm and the nearest financial institution. If greater distance reduced a firm’s information regarding the availability of funds, it might be related to the decision to apply for a loan. On the other hand, the creditworthiness of the firm should be independent of its location and should be unlikely to enter into the approval process. Unfortunately, we did not find a direct relationship between distance to the nearest financial institution and the probability of applying for a loan. This may be due to the fact that few firms are located more than a very short distance from the nearest financial institution.

As an alternative that answers a different, but related, question, we consider the ability of firms to get credit among those who desired it, regardless of whether or not they applied. This amounts to analyzing access to credit rather than loan approval and includes in the denominator those firms that needed credit but did not apply because they feared rejection. If differences by race in this rate among all firms who needed credit are greater than differences by race in the rate of denial among loan applicants, then this would indicate that African American-owned firms and other minority-owned firms have even less access to credit than an analysis of loan applicants would indicate.

To test this proposition, we estimate a regression model comparable to the one reported in Table 5.10 for the sample of firms that applied for a loan, except that this analysis considers all firms seeking credit and treats those who did not apply for fear of rejection as denials. The sample excludes firms that did not need additional credit in the preceding three years. The results, reported in Table 5.16, are consistent with the previous analysis; we find that selection is not much of an issue for African American-owned firms nationally, or in the construction sector subsample, or for Asian-owned firms nationally or in the WSC division. Regardless of whether we consider denial rates among applicants or denial rates among firms that desired additional credit, African American-owned firms are 20-30 percentage points less likely to obtain credit once control variables are included and even higher than that when they are not. For Hispanic-owned firms, however, some selection bias is evident. Among the pool of loan applicants, Hispanic-owned firms are not statistically significantly more likely to be denied than other firms with the same characteristics (see, *e.g.*, Table 5.8, Column 5). Among the pool of firms seeking additional credit, however, Hispanic-owned firms are 17 percentage points more likely to be denied access to credit, and 17 percentage points more likely in the WSC, and these differences are statistically significant.

Table 5.16. Models of Failure to Obtain Credit Among Firms that Desired Additional Credit

Specification	African American	Asian	Native American	Hispanic	Non-minority female
a) USA					
No Other Control Variables (n=2,646)	0.455 (14.84)	0.298 (6.82)	0.188 (1.57)	0.297 (7.76)	0.126 (4.01)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=2,643)	0.276 (6.93)	0.180 (3.42)	-0.008 (0.06)	0.165 (3.51)	0.049 (1.38)
b) WSC					
No Other Control Variables (n=2,646)	0.457 (14.16)	0.299 (6.45)	0.199 (1.45)	0.322 (7.25)	0.138 (4.18)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=2,643)	0.292 (7.02)	0.172 (3.09)	0.041 (0.24)	0.166 (3.07)	0.054 (1.44)
c) Construction					
No Other Control Variables (n=463)	0.413 (6.12)	0.196 (1.46)	0.128 (0.36)	0.255 (2.71)	0.043 (0.51)
Full Set of Control Variables (same as Table 5.8, Column 3 except for loan characteristics) (n=463)	0.257 (2.85)	0.102 (0.53)	-0.180 (0.41)	0.121 (1.00)	-0.094 (1.04)

Source: NERA calculations from 1993 NSSBF.

Notes: (1) Reported estimates are Probit derivatives, t-statistics in parentheses. (2) The sample consists of all firms that applied for loans along with those who needed credit, but did not apply for fear of refusal. (3) Failure to obtain credit includes those firms that were denied and those that did not apply for fear of refusal. (4) Dependent variable is set to one if the firm failed to obtain credit and to zero if the firm applied for credit and had their loan application approved.

H. Analysis of Credit Market Discrimination in the U.S. in 1998

We turn next to an examination of the extent to which discrimination in the credit market changed between 1993 and 1998 using data from the 1998 SSBF conducted by the Board of Governors of the Federal Reserve System.¹⁴⁰ This section revises the estimates obtained above using the earlier NSSBF. Compared to the earlier NSSBF, the overall sample size in the 1998 survey was somewhat smaller and several of the questions were altered. However, the results are

¹⁴⁰ The target population of the survey was for-profit businesses with fewer than 500 employees that were either a single establishment or the headquarters of a multiple establishment company, and were not agricultural firms, financial institutions, or government entities. These firms also had to be in business during December 1998. Data were collected for fiscal year-end 1998. Like its 1993 counterpart, the purpose of this survey was to gather information about small business financial behavior and the use of financial services and financial service providers by these firms. The objectives of the survey were to collect information that can inform researchers and policy makers on the availability of credit to small businesses; the location of the sources of financial services; the types of financial services used, including checking accounts, savings accounts, various types of credit, credit cards, trade credit, and equity injections; as well as the firm's recent credit acquisition experiences. The survey also investigated the level of debt held by these firms and their accessibility to credit. Additionally, the survey collected information on firm and owner demographics, as well as the firm's recent income statement and balance sheet.

still clear—African American-owned firms faced discrimination in the credit market. In addition, there is evidence of credit market discrimination against other types of minority-owned firms as well. Below, we present four sections of findings, all of which are consistent with those from the earlier NSSBF survey.

1. Qualitative Evidence

Consistent with the earlier survey, African American-owned firms in 1998 reported that the biggest problem their firm currently faced was “financing and interest rates” (Table 5.17). In the earlier survey, respondents were asked to report problems in the preceding 12 months (Tables 5.3 and 5.4) and over the next 12 months (Tables 5.5 and 5.6). Interestingly, even though credit availability was by far the most important category for African Americans (21 percent in Table 5.5), interest rates were relatively unimportant (2 percent). The 1998 survey, however, did not report separate categories.

Table 5.17. What is the Most Important Problem Facing Your Business Today?

	Non-minority Male	African American	Other	Hispanic	Non-minority Female	Total
Financing and interest rates	5.8%	18.2%	10.6%	8.1%	6.2%	6.8%
Taxes	7.7%	1.9%	5.3%	3.1%	6.6%	6.9%
Inflation	0.4%	0.6%	0.0%	1.0%	0.4%	0.4%
Poor sales	7.0%	5.9%	11.6%	7.0%	8.3%	7.5%
Cost/availability of labor	3.9%	3.3%	2.4%	3.5%	4.5%	3.9%
Government regulations/red tape	7.1%	3.0%	4.8%	8.1%	6.5%	6.8%
Competition (from larger firms)	11.1%	10.7%	10.6%	18.4%	10.2%	11.3%
Quality of labor	14.4%	11.0%	9.4%	8.7%	9.1%	12.6%
Cost and availability of insurance	2.6%	1.0%	0.8%	0.0%	2.3%	2.2%
Other	11.4%	10.0%	8.3%	16.0%	12.7%	11.7%
Cash flow	4.6%	10.9%	6.3%	3.5%	3.3%	4.6%
Capital other than working capital	1.1%	1.7%	4.1%	0.8%	1.3%	1.3%
Acquiring and retaining new customers	3.1%	3.9%	5.0%	1.8%	3.3%	3.2%
Growth of firm/industry	0.9%	1.0%	1.2%	0.1%	0.4%	0.8%
Overcapacity of firm/industry	0.1%	0.0%	0.0%	0.3%	0.0%	0.1%
Marketing/advertising	2.1%	3.9%	2.5%	2.8%	3.6%	2.5%
Technology	1.4%	1.2%	1.6%	2.6%	1.3%	1.5%
Costs, other than labor	2.7%	1.8%	2.5%	3.6%	3.8%	2.9%
Seasonal/cyclical issues	1.3%	1.2%	0.7%	0.4%	0.7%	1.1%
Bill collection	2.8%	2.2%	2.4%	2.6%	2.8%	2.8%
Too much work/not enough time	3.6%	2.2%	4.3%	1.4%	5.7%	3.9%
No problems	4.6%	4.3%	5.6%	5.8%	6.4%	5.1%
Not ascertainable	0.4%	0.0%	0.0%	0.0%	0.7%	0.4%

Source: NERA calculations from the 1998 SSBF (n=3,561).

Note: Results are weighted.

2. Differences in Loan Denial Rates by Race/Ethnicity

In 1998, as in the earlier survey, in comparison with firms owned by nonminority males, minority- and female-owned firms were less creditworthy, more likely to have their loan applications turned down, more likely not to apply for a loan for fear of being denied, and consistently smaller and younger. Moreover, their owners had lower amounts of both home and non-home equity. Minority-owned firms in general, and African American-owned firms in particular, were much less likely to be classified as having a “low risk” credit rating by Dun & Bradstreet.¹⁴¹

In the earlier survey, respondents were asked “During the last three years has the firm applied for credit or asked for the renewal of terms on an existing loan?” In 1998, a narrower question limited to new loans was asked—“Did the firm apply for new loans in the last three years?” In 1993, 43 percent answered the question in the affirmative compared with 27 percent in 1998. Despite the fact that in 1993 the question was broader, the pattern of denials by race and gender is similar across the years. As can be seen below, minority-owned firms were especially likely to have their loan applications denied.

	Percentage of Loan Applications Denied	
	1993	1998
Nonminority Males	26.2%	24.4%
African Americans	65.9%	62.3%
Asians/Pacific Islanders, Native Americans, <i>etc.</i>	39.9%	47.0%
Hispanics	35.9%	49.9%
Nonminority Females	30.1%	23.5%
Overall	28.8%	28.6%

Similarly, the proportion of firms reporting that they did not apply for fear of being denied is similar by race, ethnicity, and gender across the two survey years. More than half of African American owners did not apply for a loan for fear of being denied compared with only one out of five nonminority males.

	Percentage Not Applying for Fear of Denial	
	1993	1998
Nonminority Males	22.5%	20.2%
African Americans	60.7%	53.9%
Asians/Pacific Islanders, Native Americans, <i>etc.</i>	27.5%	23.1%
Hispanics	41.5%	34.3%
Nonminority Females	22.7%	24.2%
Overall	24.7%	23.3%

In the 1998 SSBF survey, respondents who were denied loans were asked if they believed there were reasons other than the official ones provided by their financial institution as to why their loan applications were turned down. Among numerous options provided were the following:

¹⁴¹ Information on home and non-home equity or on the Dun & Bradstreet credit rating was not available in the 1993 survey.

- a) Prejudice on a racial/ethnic basis.
- b) Prejudice against women.
- c) Prejudice against the business location.
- d) Prejudice against the business type.
- e) Prejudice or discrimination (not-specified or other).

Among firm owners who had applied for credit within the last three years and were denied, 34.1 percent believed there were reasons for their denial beyond the official explanation provided by the financial institution. Among nonminorities, 7.7 percent suspected some sort of prejudice. By contrast, the figure among minorities was 25.8 percent. Among owners who needed credit but did not apply for fear of denial, a similar pattern was observed. Only 1.7 percent of nonminorities stated prejudice was the reason, whereas among minorities the figure was 6.8 percent.

In Tables 5.8 and 5.9, the determinants of loan denial rates were estimated using data from the 1993 NSSBF. It was found that African American-owned firms were almost twice as likely to have their loans denied than nonminority male-owned firms, even after controlling for a host of variables included primarily to control for the possibility that minority-owned firms are smaller and less creditworthy than those owned by nonminority men.

A similar exercise is performed below in Tables 5.18 and 5.19 using data from the 1998 SSBF. Column 1 in Table 5.18 shows that African American-owned firms in 1998 had a 42.2 percentage point higher probability of denial than nonminority male-owned firms before taking account of creditworthiness of the firm or any other characteristics. For 1993, the comparable figure was 44.3 percentage points. The addition of a large number of controls reduces the percentage point differential for African Americans to 21.8 in Column 5 as the full set of controls is added. For 1993, the comparable figure was 24.1 percentage points.

The main difference between 1993 and 1998 is that now we find evidence that the probability of denial is significantly higher for Hispanic-owned firms as well as for African American-owned firms. In Table 5.18, Column 5, Hispanic-owned firms have a 17.1 percentage point higher probability of being denied than nonminority male-owned firms. In Table 5.8, by contrast, denial probabilities for Hispanic-owned firms were *not* significantly different from those of nonminority male-owned firms. If anything, discrimination in the small business credit market appears to have worsened during the late 1990s.

Table 5.18. Determinants of Loan Denial Rates—USA

	(1)	(2)	(3)	(4)	(5)
African American	0.422 (7.94)	0.254 (5.36)	0.217 (5.05)	0.192 (4.52)	0.218 (4.74)
Asian/Pacific Islander	0.148 (2.54)	0.129 (2.52)	0.049 (1.25)	0.023 (0.65)	0.028 (0.77)
Hispanic	0.353 (6.44)	0.269 (5.37)	0.211 (4.69)	0.183 (4.21)	0.171 (4.00)
Nonminority Female	0.087 (2.22)	0.049 (1.55)	0.024 (0.96)	0.016 (0.66)	0.011 (0.44)
Judgments		0.272 (4.28)	0.249 (4.32)	0.272 (4.47)	0.262 (4.20)
Firm delinquent		0.081 (2.88)	0.115 (4.20)	0.103 (3.88)	0.111 (4.01)
Personally delinquent		0.092 (2.85)	0.039 (1.59)	0.042 (1.69)	0.045 (1.76)
Bankrupt past 7 years		0.504 (4.48)	0.406 (3.83)	0.392 (3.67)	0.395 (3.64)
\$1998 sales (*10 ⁸)		-0.000 (2.47)	-0.000 (0.26)	0.000 (0.02)	0.000 (0.03)
\$1998 firm equity (*10 ⁸)		0.000 (1.40)	0.000 (0.46)	0.000 (0.20)	0.000 (0.06)
Owner home equity (*10 ⁸)		0.000 (0.52)	0.000 (1.47)	0.000 (0.96)	0.000 (0.90)
Owner net worth (*10 ⁸)		-0.000 (1.25)	-0.000 (1.28)	-0.000 (1.19)	-0.000 (1.24)
Owner years of experience		-0.002 (1.42)	-0.001 (0.49)	-0.000 (0.34)	-0.000 (0.21)
Owner share of business		0.000 (0.75)	-0.000 (0.12)	0.000 (0.03)	-0.000 (0.33)
Dun & Bradstreet credit ratings (4 variables)	No	Yes	Yes	Yes	Yes
Owner Education (6 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (1 variable)	No	No	Yes	Yes	Yes
Geographic Division (8 indicator variables)	No	No	No	Yes	Yes
Industry (8 indicator variables)	No	No	No	Yes	Yes
Year of Application (5 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (11 indicator vars.)	No	No	No	No	Yes
N	924	924	924	924	905
Pseudo R ²	.1061	.2842	.3714	.3910	.4015
Chi ²	90.0	241.1	315.1	331.8	337.8
Log likelihood	-379.3	-303.7	-266.7	-258.3	-251.7

Source: See Table 5.17.

Notes: (1) Reported estimates are derivatives from Probit models, t-statistics are in parentheses. (2) “Other firm characteristics” include variables indicating whether the firm had a line of credit, 1998 full time equivalent employment, firm age, metropolitan area, legal form of organization (sole proprietorship, partnership, LLP, S-corporation, C-corporation, or LLC), existing long run relation with lender, geographic scope of market (regional, national, foreign or international), the value of the firm’s inventory, the firm’s cash holdings, and the value of land held by the firm. (3) “Characteristics of the loan” includes the size of the loan applied for.

Table 5.19. Determinants of Loan Denial Rates—WSC

	(1)	(2)	(3)	(4)	(5)
African American	0.395 (6.70)	0.205 (4.10)	0.185 (4.09)	0.164 (3.65)	0.187 (3.86)
Asian/Pacific Islander	0.155 (2.51)	0.149 (2.68)	0.066 (1.52)	0.040 (0.99)	0.043 (1.05)
Hispanic	0.331 (5.27)	0.259 (4.66)	0.213 (4.26)	0.182 (3.74)	0.168 (3.55)
Nonminority Female	0.094 (2.25)	0.057 (1.68)	0.033 (1.21)	0.027 (1.00)	0.023 (0.85)
African American*WSC	0.089 (0.78)	0.131 (1.22)	0.059 (0.72)	0.070 (0.82)	0.077 (0.87)
Asian/Pacific Islander*WSC	-0.044 (0.31)	-0.069 (0.88)	-0.055 (1.04)	-0.050 (0.95)	-0.047 (0.84)
Hispanic*WSC	0.054 (0.51)	-0.004 (0.06)	-0.022 (0.41)	-0.002 (0.04)	-0.001 (0.01)
Nonminority Female*WSC	0.094 (2.25)	0.057 (1.68)	0.033 (1.21)	0.027 (1.00)	0.023 (0.85)
WSC division	0.000 (0.00)	0.039 (0.81)	0.041 (0.99)	0.016 (0.29)	0.016 (0.30)
Creditworthiness Controls (8 variables)	No	Yes	Yes	Yes	Yes
Owner's Education (6 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (1 variable)	No	No	Yes	Yes	Yes
Region (7 indicator variables)	No	No	No	Yes	Yes
Industry (8 indicator variables)	No	No	No	Yes	Yes
Year of Application (5 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (11 indicator vars.)	No	No	No	No	Yes
N	924	924	924	924	905
Pseudo R ²	.1080	.2907	.3764	.3950	.4059
Chi ²	91.7	246.6	319.35	335.2	341.5
Log likelihood	-378.4	-301.0	-264.6	-256.7	-249.9

Source: See Table 5.17.

Notes: (1) t-statistics in parentheses. (2) Other creditworthiness controls are the four other variables included in Column 2 of Table 5.18.

Table 5.19, focusing on the WSC division, yields similar results—showing significantly larger denial probabilities for African American-owned firms and Hispanic-owned firms (18.7 and 16.8 percent, respectively) than for nonminority male-owned firms. The WSC indicator was not significant in Table 5.19. None of the interaction terms between WSC and race, ethnicity or gender, were significant either, indicating that the loan denial results for the WSC are not significantly different than for the nation as a whole.

Although tempered by the smaller sample size available, the quality of the experiment is somewhat better using the 1998 data than it was using the 1993 data due to the availability of an improved set of controls for the creditworthiness of the firm and its owner. In 1998, three new variables are included regarding the financial viability of the firm:

- a) The value of the equity, if any, in the owner's home.
- b) The owner's net worth excluding home equity and equity in the firm.
- c) The firm's Dun & Bradstreet credit rating in five categories (low, moderate, average, significant, and high) indicating the likelihood of loan default.¹⁴²

Despite the fact that these new variables do help to predict loan denials,¹⁴³ the estimated race differences including these variables are unchanged from those reported above.¹⁴⁴ This suggests that the large estimated differences in the denial probabilities estimated in 1993 were not biased significantly upwards by the fact that these variables were unavailable.

3. Effect of 1998 Survey Design Changes on Differences in Loan Denial Rates

The question we used to examine the 1998 data was somewhat narrower than the question used in the 1993 survey because it was changed by the survey designers. The 1998 question asked about new loans over the preceding three years, whereas the 1993 question covered all loans including renewals. Responses in 1998 were as follows:

Applied for New Loans Last Three Years	Number	Percent
Did not apply	2,599	73.0%
Always approved	713	20.0%
Always denied	166	4.7%
Sometimes approved/sometimes denied	83	2.3%
Total	3,561	100.0%

The dependent variable used in Tables 5.18 and 5.19 was set to one if the loan application was always denied and was set to zero if the application was always approved or sometimes approved/sometimes denied. An alternative dependent variable—*denylast*—is set to one if the application is always denied, set to zero if always approved. Those responding “sometimes approved/sometimes denied” are excluded from the analysis. Column (1) of Table 5.20 replicates column 1 of Table 5.18 using *denylast* as the dependent variable with the smaller sub-sample. African Americans, Hispanics, Asians, and Nonminority females are all confirmed to face higher denial rates than nonminority males using this specification. For African Americans and Hispanics, the difference is 46 and 36 percentage points, respectively. For Asians, the difference is 19 percentage points, and for Nonminority females, 8 percentage points.

¹⁴² The D&B Commercial Credit Score Report predicts the likelihood of a company paying in a delinquent manner (90+ days past terms) during the next 12 months based on the information in D&B's file. The score is intended to help firms decide quickly whether to accept or reject accounts, adjust terms or credit limits, or conduct a more extensive review based on the report D&B provides. Firms can also determine the company's relative ranking among other businesses in the D&B database.

¹⁴³ The coefficients and t-statistics on the credit score variables when they were included alone in a U.S. loan denial model was as follows: moderate risk = .228 (2.45); average risk = .295 (3.25); significant risk = .319 (3.28); high risk = .391 (3.53); $n = 924$ pseudo $r^2 = .0253$. Excluded category “low risk.” Results were essentially the same when a control for WSC was also included.

¹⁴⁴ This confirms the findings of Cavalluzzo, Cavalluzzo and Wolken (2002) who performed a similar exercise with the 1993 data.

Results consistent with discrimination are confirmed for African Americans and Hispanics in Column (2) of Table 5.20 when a host of demographic and financial characteristics and geographic and industry indicators are included. When interaction terms for the WSC division are added to the model as in Columns (3) and (4), results for African Americans and Hispanics remain statistically significant. Neither the WSC indicator nor any of the interactions between WSC and race, ethnicity, or gender is significant.

Table 5.20. More Loan Denial Probabilities

	(1)	(2)	(3)	(4)
	<i>Denylast</i>	<i>Denylast</i>	<i>Denylast</i>	<i>Denylast</i>
African American	0.457 (8.00)	0.246 (4.76)	0.439 (6.82)	0.220 (3.91)
Asian	0.185 (2.81)	0.027 (0.65)	0.183 (2.67)	0.037 (0.81)
Hispanic	0.360 (6.28)	0.171 (3.67)	0.342 (5.15)	0.167 (3.21)
Nonminority female	0.083 (2.00)	0.005 (0.20)	0.087 (1.98)	0.015 (0.50)
African American* WSC			0.066 (0.57)	0.054 (0.61)
Asian* WSC			0.006 (0.03)	-0.041 (0.50)
Hispanic* WSC			0.056 (0.50)	0.005 (0.07)
Nonminority female* WSC			-0.032 (0.27)	-0.043 (0.81)
WSC			-0.015 (0.26)	0.021 (0.34)
Creditworthiness Controls	No	Yes	No	Yes
Owner's Education	No	Yes	No	Yes
Other Firm Characteristics	No	Yes	No	Yes
Characteristics of the loan	No	Yes	No	Yes
Region	No	Yes	No	Yes
Industry	No	Yes	No	Yes
N	846	846	846	846
Pseudo R ²	.1112	.4265	.1121	.4286
Chi ²	90.9	348.7	91.7	350.5
Log likelihood	-363.3	-234.5	-363.0	-233.6

Source: See Table 5.18.

4. Differences in Interest Rates, Credit Card Use, and Failure to Apply for Fear of Denial

Tables 5.21 through 5.23 provide confirmation from the 1998 survey of a number of other results from the 1993 survey reported above.

First, Table 5.21, which is similar to Tables 5.13 and 5.14, finds that conditional on obtaining a loan, African American-owned firms are charged a higher price for their credit—on average 1.06 percentage points nationally, and 1.32 percentage points in the WSC. These results are not significantly different in the construction sector either.¹⁴⁵

In Table 5.22, which is similar to Table 5.15, shows that African American-owned firms are much more likely not to apply for a loan for fear that they will be denied. Based on all of the foregoing evidence, this is perhaps a sensible decision—if and when they do apply they are almost twice as likely as nonminority male-owned firms to have their application rejected. This is evident in the WSC as well as in the construction sector. There is some evidence of this phenomenon for Hispanic-owned firms nationally as well.

Finally, Table 5.23, which is comparable to Tables 5.11 and 5.12, suggests that when the financial institution does not know the race or ethnicity of the applicant—as is often the case in an application for a credit card—there are no differences by race or ethnicity in the usage for business purposes of either business or personal credit cards. There was also no evidence of any race effects in the use of business or personal credit cards in the WSC division (rows 3 and 4) or in construction (rows 5 and 6).

Our confidence in the strength of our findings from the earlier NSSBF survey is elevated by these findings from the 1998 SSBF survey, which strongly confirm the original results. Unfortunately, African Americans continued to be discriminated against in the market for small business credit. By 1998, this discrimination appears to have been on the increase for African Americans and to be expanding to impact other minority groups, such as Hispanics and Asians/Pacific Islanders, as well. This is an important market failure, and one which government agencies such as the City of Austin cannot ignore if they are to avoid passive participation in a discriminatory market area.

¹⁴⁵ There is some indication that White females nationally pay slightly less for their loans, but this difference is not quite statistically significant. Blacks in the WSC appear to pay less for their loans than Blacks nationally, but again this difference is not quite statistically significant.

Table 5.21. Models of Interest Rate Charged

Specification	African American	African American * WSC	African American * Construction	Asian/Pacific Islander	Hispanic	Non-minority Female
1a) All Loans (as in column 5 of Table 5.18) n=765	1.064 (2.66)	-	-	0.559 (1.49)	-0.088 (0.23)	-0.501 (1.93)
1b) All Loans (as in column 5 of Table 5.19) n=765	1.319 (2.86)	-1.875 (1.84)	0.635 (0.63)	0.337 (0.78)	0.167 (0.35)	-0.419 (1.47)

Source: See Table 5.18.

Notes: (1) Each line of this table represents a separate regression with all of the control variables. (2) The sample consists of firms who had applied for a loan and had their application approved.

Table 5.22. Racial Differences in Failing to Apply for Loans Fearing Denial

Specification	African American	Asian/Pacific Islander	Hispanic	Nonminority Female
a) U.S.				
No Other Control Variables (n=3,448)	0.353 (11.90)	0.046 (1.48)	0.173 (5.77)	0.051 (2.55)
Full Set of Control Variables (n=3,448)	0.208 (7.04)	-0.012 (0.43)	0.052 (1.87)	0.011 (0.59)
b) WSC division				
No Other Control Variables (n=371)	0.407 (4.78)	-0.026 (0.25)	0.075 (1.13)	0.018 (0.28)
Full Set of Control Variables (n=367)	0.178 (2.67)	-0.053 (1.15)	-0.039 (1.15)	-0.012 (0.36)
c) Construction				
No Other Control Variables (n=613)	0.371 (5.06)	0.117 (1.43)	0.020 (0.26)	0.122 (2.08)
Full Set of Control Variables (n=609)	0.273 (3.69)	0.099 (1.32)	-0.062 (1.13)	0.038 (0.74)

Source: See Table 5.18.

Notes: (1) Reported estimates are Probit derivatives with t-statistics in parentheses. (2) Full set of control variables as in Column 5 of Table 5.18, except for loan amount, year of application, and type of lender.

Table 5.23. Models of Credit Card Use

Specification	African American	Asian/Pacific Islander	Hispanic	Nonminority Female	Sample Size
1) Business Credit Card	-0.001 (0.02)	-0.038 (1)	-0.014 (0.38)	-0.018 (0.72)	3,561
2) Personal Credit Card	-0.018 (0.54)	0.016 (0.44)	-0.050 (1.42)	0.012 (0.52)	3,561
3) Business Credit Card WSC	-0.002 (0.02)	-0.196 (1.55)	-0.041 (0.46)	0.082 (1.01)	382
4) Personal Credit Card WSC	-0.078 (0.80)	0.197 (1.49)	-0.003 (0.03)	0.079 (0.98)	382
5) Business Credit Card Construction & related	0.056 (0.62)	-0.074 (0.7)	0.087 (0.86)	-0.025 (0.35)	624
6) Personal Credit Card Construction & related	0.003 (0.04)	0.047 (0.46)	-0.092 (1.01)	-0.073 (0.99)	624

Source: See Table 5.18.

Notes: (1) Each line of this table represents a separate regression with the same control variables as Column 5 of Table 5.18, except for loan amount, year of application, and type of lender. (2) The dependent variable indicates whether the firm used business or personal credit cards to finance business expenses. (3) In all specifications, the sample size includes all firms. (4) Reported estimates are Probit derivatives with t-statistics in parentheses.

I. Analysis of Credit Market Discrimination in the U.S. in 2003

The most recent wave of the Survey of Small Business Finances was made available by the Board of Governors of the Federal Reserve System in 2007.¹⁴⁶ This is the fourth and final survey of U.S. small businesses conducted by the Board of Governors since 1987.¹⁴⁷ The survey gathered data from 4,072 firms selected to be representative of small businesses operating in the U.S. at the end of 2003. The survey covered a nationally representative sample of U.S. for profit, non-financial, non-subsidiary, nonagricultural, and nongovernmental businesses with fewer than 500 employees that were in operation at year end 2003 and at the time of interview. Most interviews took place between June 2004 and January 2005. The sample was drawn from the Dun & Bradstreet Market Identifier file. The number of employees varied from zero to 486 with a weighted median of 3.0 and weighted mean of 8.6.

¹⁴⁶ See www.federalreserve.gov/pubs/oss/oss3/ssbf03/ssbf03home.html.

¹⁴⁷ The Federal Reserve Board cancelled the SSBF subsequent to the completion of the 2003 wave, ostensibly for financial reasons. See Robb (2010).

Unfortunately, the 2003 SSBF did not over-sample minority-owned firms, as in the first three survey waves. According to survey staff, this was due to concerns that doing so would delay the survey timeline and reduce the overall response rate.¹⁴⁸

In 1998, almost 8 percent of survey respondents were African American, compared to slightly more than 3 percent in 2003. Hispanics were almost 7 percent in 1998 but less than 4 percent in 2003. Other minorities were 6.5 percent in 1998 but only 5.4 percent in 2003.¹⁴⁹ Although the population weights were adjusted to accommodate these changes, even these weighted percentages are significantly smaller for minorities in 2003 than in 1998.¹⁵⁰

Mach and Wolken (2006) reported using these data that 13.1 percent of firms were owned by nonminority or Hispanic individuals; the share is statistically lower than in 1998 (14.6 percent). The shares for African Americans and Asians/Pacific Islanders each held roughly constant at 46 percent; the share of American Indians and Alaska natives held at roughly 16 percent. However, the share of Hispanics fell a statistically significant amount from 5.66 percent to 4.26 percent, which is somewhat surprising given the evidence that Hispanics are a growing share of the U.S. population—up from 12.56 percent in 2000 to 14.56 percent in 2005 (Table 4). The percentage of firms owned by females also declined from 72.06 percent to 64.86 percent. Despite these drawbacks, our analysis of the 2003 SSBF yields results that are strongly consistent with those obtained from the 1993 and 1998 survey waves. The remainder of this section presents our findings from this analysis.¹⁵¹

1. Qualitative Evidence

Table 5.24 reports the results of asking business owners for the most important problem currently facing their firm. Consistent with the 1993 and 1998 surveys, firms owned by minority and women-owned firms were more likely to say that their most important problem was “financing and interest rates.” Once again, the African American-nonminority difference was most pronounced—only slightly more than 5 percent of nonminority male business owners reported this as their major problem compared to almost 21 percent of African American business owners.

¹⁴⁸ See fn. 105, above.

¹⁴⁹ The impact on women was not as pronounced. Females were 23.3 percent in 1998 and 20.9 percent in 2003. For nonminority females, the figures are 17.8 percent in 1998 and 18.2 percent in 2003.

¹⁵⁰ Mach and Wolken (2006, Table 2) report that weighted figures for Blacks were 4.1 percent in 1998 and 3.7 percent in 2003. Hispanics were 5.6 and 4.2 percent, respectively; Asians and Pacific Islanders were 4.4 and 4.2 percent, respectively; Native Americans were 0.8 and 1.3 percent, respectively; and women were 24.3 and 22.4 percent, respectively.

¹⁵¹ The data file provided by the Board of Governors includes five separate observations per firm. That is to say, there are $4240 \times 5 = 21,200$ observations. These so-called multiple imputations are done via a randomized regression model, and are included because where there are missing observations several alternative estimates are provided. Where values are not missing, the values for each of the five imputations are identical. We make use of the data from the first imputation: the results presented here are essentially identical whichever imputation is used. Overall, only 1.8 percent of observations in the data file were missing.

Table 5.24. What is the Most Important Problem Facing Your Business Today?

	Non-minority Male	African American	Other	Hispanic	Non-minority Female	Total
Financing and interest rates	5.4%	20.7%	9.1%	5.7%	5.8%	6.3%
Taxes	6.3%	2.4%	4.9%	7.7%	4.3%	5.7%
Inflation	2.7%	1.0%	2.3%	0.5%	1.4%	2.3%
Poor sales or profitability	17.8%	38.5%	28.9%	30.0%	22.5%	20.6%
Cost/availability of labor	1.5%	0.0%	0.6%	1.5%	1.5%	1.4%
Government regulations/red tape	4.7%	1.0%	5.4%	9.6%	2.5%	4.5%
Competition from larger firms	4.0%	2.7%	2.7%	3.6%	3.6%	3.8%
Quality of labor	7.9%	6.9%	5.0%	3.8%	6.5%	7.2%
Cost and availability of insurances	10.3%	1.8%	3.1%	5.2%	6.4%	8.6%
Other	2.6%	1.9%	4.0%	2.8%	1.6%	2.5%
None	5.3%	3.4%	9.4%	4.1%	8.6%	6.0%
Cash flow	6.2%	5.1%	4.6%	7.1%	6.8%	6.3%
Growth	0.9%	2.7%	0.4%	1.1%	0.8%	1.0%
Foreign competition	1.3%	0.0%	1.0%	0.1%	0.7%	1.0%
Competition - other	1.6%	0.8%	1.8%	0.1%	1.1%	1.4%
Availability of materials/resources	0.8%	0.8%	0.6%	1.6%	1.2%	0.9%
Labor problems other than cost or quality	1.2%	2.2%	0.2%	0.0%	1.3%	1.1%
Internal management/administrative problems	4.2%	2.5%	4.3%	1.0%	6.1%	4.4%
Environmental constraints	1.4%	0.7%	1.6%	2.3%	2.0%	1.6%
Advertising and public awareness	2.2%	1.8%	2.4%	1.8%	3.3%	2.4%
Market/economic/industry factors	4.9%	1.9%	4.0%	2.3%	6.2%	4.8%
Health care cost and availability	1.5%	0.0%	0.7%	0.8%	1.4%	1.4%
Energy costs	1.5%	0.0%	0.7%	3.7%	1.2%	1.4%
Costs other than health care and energy	2.2%	1.0%	0.1%	3.6%	1.0%	1.9%
Owner's personal problems	0.3%	0.0%	0.0%	0.0%	0.8%	0.4%
Technology	0.4%	0.0%	0.7%	0.0%	0.5%	0.4%
Dealing with insurance companies	0.3%	0.4%	0.0%	0.0%	0.4%	0.3%
War and September 11th	0.2%	0.0%	1.3%	0.0%	0.5%	0.3%

Source: NERA calculations from the 2003 SSBF (n=4,072).

Note: Results are weighted.

2. Differences in Loan Denial Rates by Race/Ethnicity

Tables 5.25 and 5.26 present estimates of loan denial probabilities for the nation as a whole and for the WSC division using a regression model comparable to that used with the 1993 and 1998 survey waves.¹⁵²

Column (1) in Table 5.25 (comparable to Table 5.8 for 1993 and 5.18 for 1998) shows that African American-owned firms in 2003 had a 45.9 percentage point higher probability of denial than nonminority male-owned firms before taking into account the creditworthiness of the firm or any other characteristics. The addition of a large number of controls reduces the percentage point differential for African Americans to 9.4 in Column (5) as the full set of controls is added. The coefficients in Column (5) for nonminority females and for Native American and other minority groups are not significant, however.

Table 5.26 (comparable to Table 5.9 for 1993 and 5.19 for 1998) focuses on the WSC division and yields similar results—showing significantly larger denial probabilities for African American-owned firms than for nonminority male-owned firms, persisting even after the addition of all of the control variables. The WSC indicator was not significant in Table 5.26, and with one exception, neither were the interaction terms between WSC and race, ethnicity or gender, indicating that the loan denial results for the WSC are not significantly different than for the nation as a whole. The exception was Asian/Pacific Islander-owned firms, which shows a significantly higher denial probability in the WSC than in the nation as a whole.

¹⁵² In 2003, the credit application question was changed from 1998 to once again include requests for renewals as well as new loans, making it comparable to the 1993 version.

Table 5.25. Determinants of Loan Denial Rates—USA

	(1)	(2)	(3)	(4)	(5)
African American	0.459 (8.38)	0.136 (5.47)	0.105 (4.80)	0.091 (5.04)	0.094 (4.95)
Asian/Pacific Islander	0.055 (1.51)	0.020 (1.59)	0.009 (1.01)	0.002 (0.49)	0.001 (0.18)
Hispanic	0.067 (1.74)	0.008 (0.83)	0.004 (0.58)	0.001 (0.30)	0.001 (0.25)
Native American and Other	0.184 (2.22)	0.061 (1.95)	0.032 (1.47)	0.021 (1.43)	0.021 (1.49)
Nonminority Female	0.043 (2.17)	0.003 (0.70)	0.002 (0.49)	0.001 (0.57)	0.002 (0.76)
Judgments against owner		0.007 (0.66)	0.003 (0.35)	0.003 (0.54)	0.006 (0.90)
Judgments against firm		0.005 (1.16)	0.005 (1.42)	0.001 (0.54)	0.001 (0.64)
Firm delinquent		0.032 (3.78)	0.021 (3.23)	0.019 (3.89)	0.021 (4.08)
Personally delinquent		-0.007 (0.69)	-0.006 (1.02)	-0.003 (0.82)	-0.002 (0.58)
Owner Bankrupt past 7 years		0.046 (1.36)	0.041 (1.35)	0.052 (1.81)	0.044 (1.66)
Firm Bankrupt past 7 years		0.000 (0.03)	0.003 (0.37)	0.001 (0.17)	-0.001 (0.38)
\$1998 sales (*10 ⁸)		-0.000 (1.68)	0.000 (0.04)	0.000 (0.29)	0.000 (0.51)
\$1998 firm equity (*10 ⁸)		-0.000 (2.23)	-0.000 (1.03)	-0.000 (1.62)	-0.000 (1.63)
Owner home equity (*10 ⁸)		0.000 (0.28)	0.000 (0.02)	-0.000 (0.45)	-0.000 (0.26)
Owner net worth (*10 ⁸)		-0.000 (2.97)	-0.000 (2.92)	-0.000 (3.06)	-0.000 (3.26)
Owner years of experience		0.000 (0.31)	0.000 (1.00)	0.000 (0.82)	0.000 (0.62)
Owner share of business		0.000 (0.08)	0.000 (0.61)	0.000 (0.38)	0.000 (0.47)
Dun & Bradstreet credit ratings (4 variables)	No	Yes	Yes	Yes	Yes
Owner Education (6 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (1 variable)	No	No	Yes	Yes	Yes
Geographic Division (8 indicator variables)	No	No	No	Yes	Yes
Industry (8 indicator variables)	No	No	No	Yes	Yes
Year of Application (5 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (11 indicator vars.)	No	No	No	No	Yes
N	1,664	1,655	1,655	1,655	1,605
Pseudo R ²	.0850	.2267	.2901	.3336	.3681
Chi ²	74.1	192.9	246.8	283.8	310.3
Log likelihood	-399.1	-328.9	-301.9	-283.4	-266.4

Source: See Table 5.26. Notes: (1) “Other firm characteristics” include variables indicating whether the firm had a line of credit, 2003 total employment, firm age, metropolitan area, legal form of organization (sole proprietorship, partnership, LLP, S-corporation, C-corporation, or LLC), existing long run relation with lender, geographic scope of market (local, regional, national, foreign or international), the value of the firm’s inventory, the firm’s cash holdings, the value of land held by the firm, and total salaries and wages paid. (2) “Characteristics of the loan” includes the size of the loan applied for.

Table 5.26. Determinants of Loan Denial Rates—WSC

	(1)	(2)	(3)	(4)	(5)
African American	0.414 (7.35)	0.113 (5.05)	0.084 (4.41)	0.076 (4.67)	0.077 (4.63)
Asian/Pacific Islander	0.017 (0.50)	0.004 (0.46)	-0.001 (0.14)	-0.002 (0.83)	-0.002 (1.17)
Hispanic	0.066 (1.77)	0.007 (0.80)	0.003 (0.55)	0.001 (0.26)	0.001 (0.19)
Native American and Other	0.129 (1.53)	0.042 (1.51)	0.016 (0.95)	0.006 (0.64)	0.007 (0.81)
Nonminority Female	0.037 (1.93)	0.002 (0.54)	0.001 (0.29)	0.001 (0.40)	0.001 (0.65)
African American*WSC	0.277 (1.81)	0.058 (1.02)	0.036 (0.89)	0.020 (0.82)	0.015 (0.72)
Asian/Pacific Islander*WSC	0.581 (2.79)	0.568 (3.02)	0.683 (3.23)	0.710 (3.52)	0.726 (3.51)
Native American and Other*WSC	0.367 (1.46)	0.142 (1.23)	0.187 (1.45)	0.198 (1.61)	0.134 (1.43)
Nonminority Female*WSC	0.037 (1.93)	0.002 (0.54)	0.025 (0.82)	0.020 (0.90)	0.011 (0.64)
WSC division	-0.063 (2.48)	-0.012 (2.51)	-0.008 (2.63)	-0.005 (2.42)	0.002 (0.51)
Creditworthiness Controls (10 variables)	No	Yes	Yes	Yes	Yes
Owner's Education (6 indicator variables)	No	Yes	Yes	Yes	Yes
Other Firm Characteristics (17 variables)	No	No	Yes	Yes	Yes
Characteristics of the Loan (1 variable)	No	No	Yes	Yes	Yes
Region (7 indicator variables)	No	No	No	Yes	Yes
Industry (8 indicator variables)	No	No	No	Yes	Yes
Year of Application (5 indicator variables)	No	No	No	No	Yes
Type of Financial Institution (11 indicator vars.)	No	No	No	No	Yes
N	1,664	1,655	1,655	1,655	1,605
Pseudo R ²	.1013	.2469	.3133	.3513	.3858
Chi ²	88.4	210.0	266.5	298.8	325.3
Log likelihood	-392.0	-320.3	-292.1	-275.9	-258.9

Source: See Table 5.24.

Notes: (1) t-statistics in parentheses. (2) Creditworthiness controls include presence of legal judgments against the firm during the previous 3 years, more than 60 days delinquent on any personal obligations of the firm's owner during the previous 3 years, more than 60 days delinquent on any business obligations of the firm during the previous 3 years, and declaration of owner of firm bankruptcy during the previous 7 years. (3) Balance sheet variables include firm sales in 1998, firm equity in 1998, owner's home equity in 1998, and owner's personal net worth (exclusive of firm equity and home equity) in 1998. (4) For other variables, see notes for Table 5.25.

3. Differences in Interest Rates, Credit Card Use, and Failure to Apply for Fear of Denial

Table 5.27 models the interest rate charged for those minority-owned and nonminority female-owned firms that were able to successfully obtain a loan (comparable to Tables 5.13 and 5.14 for 1993 and Table 5.21 for 1998). As was found in earlier surveys, African American business owners are hurt here as well since they have to pay, on average, 1.04 percentage points more for their loans than nonminority male business owners with identical characteristics. Hispanic business owners, as well, pay 1.00 percentage point more than their nonminority male counterparts.

Table 5.27 shows that the loan price differential is present for African American and Hispanic business owners in the WSC division as well. For African American-owned firms, the differential is particularly large—more than 3.70 percentage points more than comparable nonminority males. For Hispanic-owned firms, the differential is 1.20 percentage points. Both results are statistically significant.

Table 5.28 reports the results of estimating a model where the dependent variable is whether a business or personal credit card is used to pay business expenses (comparable to Tables 5.11 and 5.12 for 1993 and Table 5.23 for 1998). As noted above, the application procedure for business and personal credit cards is usually automated and not conducted face-to-face. If there were missing variables such as creditworthiness or some such characteristic unobserved to the econometrician, then the race and ethnicity indicator variables should enter significantly in these equations. There is some evidence that African Americans are less likely to use personal credit cards for business expenses. However, this result is not observed for business credit cards, nor is it observed in the WSC division. There is also some evidence that Hispanics in the WSC are less likely to use personal credit cards for business expenses; however, this result does not carry over to business credit cards, nor is it observed in the nation as a whole.

Table 5.27. Models of Interest Rate Charged

Specification	African American	African American* WSC	African American * Construction	Asian/Pacific Islander	Hispanic	Native American and Other	Non-minority Female
1a) All Loans (as in column 5 of Table 5.25) n=1,537	1.043 (2.02)	-		0.442 (1.24)	1.003 (2.76)	0.257 (0.34)	-0.142 (0.72)
1b) All Loans (as in column 5 of Table 5.26) n=1,537	0.766 (1.30)	2.959 (1.86)	-0.641 (0.46)	0.539 (1.33)	1.196 (2.65)	0.636 (0.76)	-0.210 (0.95)

Source: See Table 5.24.

Notes: (1) Each line of this table represents a separate regression with all of the control variables as indicated.

(2) Additionally, controls were included for whether the loan required a co-signer or guarantor, whether collateral was required and, if so, the type of collateral required. (3) The sample consists of firms that had applied for a loan and had their application approved.

Table 5.28. Models of Credit Card Use

Specification	African American	Asian/ Pacific Islander	Hispanic	Native American and Other	Non- minority Female	Sample Size
1) Business Credit Card	-0.063 (1.19)	0.037 (0.84)	-0.005 (0.10)	-0.010 (0.12)	0.002 (0.07)	3,676
2) Personal Credit Card	-0.132 (2.66)	0.036 (0.86)	-0.078 (1.72)	-0.037 (0.44)	0.036 (1.56)	3,676
3) Business Credit Card WSC	0.052 (0.28)	-0.142 (0.77)	0.117 (0.96)	-0.001 (0.00)	0.106 (1.27)	354
4) Personal Credit Card WSC	-0.066 (0.37)	0.189 (1.07)	-0.242 (2.12)	-0.269 (1.13)	0.014 (0.17)	354

Source: See Table 5.24.

Notes: (1) Each line of this table represents a separate regression with the same control variables as Column 5 of Table 5.27, except for loan amount, year of application, and type of lender. (2) The dependent variable indicates whether the firm used business or personal credit cards to finance business expenses. (3) In all specifications, the sample size is all firms. (4) Reported estimates are Probit derivatives with t-statistics in parentheses.

Finally, consistent with earlier results, Table 5.29 (comparable to Tables 5.15 for 1993 and 5.22 for 1998), shows that African American owners are much more likely not to apply for a loan fearing they will be denied. Even after controlling for a host of demographic, financial, geographic, and industry factors, African American business owners are still almost 17 percentage points more likely to fail to apply for loans for fear of denial—even though they need the credit. In the WSC division the phenomenon is evident as well—African American business owners are more than 18 percentage points more likely to fail to apply for fear of denial. In construction and related industries, the trend is even more pronounced at 28.4 percentage points. Nationally, there is evidence of this phenomenon for nonminority female business owners as well.

Table 5.29. Racial Differences in Failing to Apply for Loans Fearing Denial

Specification	African American	Asian/Pacific Islanders	Hispanic	Native American and Other	Non-minority Female
a) U.S.					
No Other Control Variables (n=3,704)	0.385 (9.48)	0.059 (1.95)	0.138 (4.01)	0.138 (2.14)	0.072 (4.47)
Full Set of Control Variables (n=3,676)	0.168 (4.75)	0.037 (1.37)	0.048 (1.76)	0.047 (0.93)	0.035 (2.44)
b) WSC division					
No Other Control Variables (n=3,704)	0.382 (8.82)	0.050 (1.6)	0.142 (4.11)	0.123 (1.73)	0.064 (3.81)
Full Set of Control Variables (n=3,676)	0.184 (4.87)	0.033 (1.17)	0.052 (1.89)	0.067 (1.14)	0.029 (1.95)
c) Construction					
No Other Control Variables (n=705)	0.492 (4.34)	-0.022 (0.29)	0.090 (1.22)	0.258 (2.17)	0.026 (0.64)
Full Set of Control Variables (n=695)	0.284 (3.02)	0.003 (0.07)	-0.010 (0.38)	0.136 (1.64)	-0.002 (0.09)

Source: See Table 5.24.

Notes: (1) Reported estimates are Probit derivatives with t-statistics in parentheses. (2) Full set of control variables as in Column 5 of Table 5.27, except for loan amount, year of application, and type of lender. (3) In Panel (b), interaction terms between race, gender and WSC were all insignificant.

J. Further Analysis of Credit Market Discrimination: NERA Surveys 1999-2007

NERA conducted local credit market surveys at nine other times and places between 1999 and 2007. These include the Chicago metropolitan area in 1999, the State of Maryland in 2000, the Jacksonville, Florida metropolitan area in 2002, the Baltimore-Washington, DC metropolitan area in 2003, the St. Louis metropolitan area in 2004, the Denver metropolitan area in 2005, the State of Maryland (again) in 2005, the State of Massachusetts in 2005, and the Memphis, TN-MS-AR metropolitan area in 2007. The Chicago, Jacksonville, Baltimore, St. Louis, and Denver surveys focused on construction and construction-related industries, while the two Maryland surveys, the Massachusetts survey and the Memphis survey included other goods and services as well.

Our Chicago, Maryland I, and Jacksonville survey questionnaires followed the format of the 1993 NSSBF, while our Baltimore, St. Louis, Denver, Maryland II, Massachusetts, and Memphis surveys followed the format of the 1998 SSBF questionnaire.

As a final check on our findings in this chapter, we combined the results of these nine NERA surveys together in a consistent format and re-estimated the basic loan denial model on this larger file. These results appear below in Table 5.30, and are remarkably similar to results seen in Tables 5.8-5.9, 5.18-5.19, and 5.25-5.26. Denial probabilities for African American-owned firms compared to nonminority male-owned firms are 29 percentage points higher—even when creditworthiness controls, other firm and owner characteristics, and interaction terms are included.

Moreover, the NERA surveys found statistically significant loan denial disparities for Hispanic-owned firms and Nonminority female-owned firms as well. Denial rates were 18-24 percentage points higher for Hispanic-owned firms and 5-9 percentage points higher for Nonminority female-owned firms than for their nonminority male-owned counterparts. Significant loan denial disparities were also observed for Native American-owned firms in some cases (9-19 percentage points higher).

Finally, as shown in Table 5.31, we modeled the rate of interest charged, conditional upon receiving loan approval, using our nine-jurisdiction dataset. Results are very similar to that observed in Tables 5.13-5.14, 5.21 and 5.27. African Americans pay almost 170 basis points more, on average, for their business credit than do nonminority males, declining to 150 basis points when creditworthiness and other firm and owner controls are accounted for.

On the basis of the foregoing, we conclude that the evidence of credit discrimination from NERA's nine local credit market surveys conducted throughout the nation between 1999-2007 is entirely consistent with the results obtained using data from the 1993 NSSBF, the 1998 SSBF, and the 2003 SSBF.

Table 5.30. Determinants of Loan Denial Rates—Nine Jurisdictions

	(1)	(2)
	<i>Most Recent Application</i>	<i>Last Three Years</i>
African American	0.289 (8.2)	0.293 (7.60)
Hispanic	0.178 (3.86)	0.244 (4.59)
Native American	0.087 (1.69)	0.188 (3.29)
Asian	0.042 (0.72)	0.003 (0.05)
Other race	0.313 (3.07)	0.364 (3.15)
Nonminority female	0.046 (1.83)	0.086 (2.96)
Judgments	0.051 (1.23)	0.119 (2.24)
Firm delinquent	0.022 (2.7)	0.057 (5.90)
Personally delinquent	0.076 (7.38)	0.077 (6.03)
Bankrupt past 3yrs	0.228 (3.99)	0.328 (4.74)
N	1,855	1,855
Pseudo R ²	.1905	.1721
Chi ²	336.0	363.3
Log likelihood	-714.1	-873.7

Source: NERA Credit Market Surveys, 1999-2007.

Notes: (1) Reported estimates are derivatives from Probit models, t-statistics are in parentheses. (2) Indicator variables are also included for the various jurisdictions.

Table 5.31. Determinants of Interest Rates—Nine Jurisdictions

	(1)	(2)
African American	1.683 (3.44)	1.491 (2.98)
Asian/Pacific Islander	1.221 (2.16)	0.789 (1.34)
Hispanic	0.820 (1.48)	0.895 (1.56)
Native American	1.241 (1.52)	1.008 (1.24)
Other race	-1.115 (0.63)	-1.072 (0.61)
Nonminority Female	0.046 (0.16)	0.018 (0.06)
Judgments		0.537 (0.85)
Firm delinquent		-0.041 (0.36)
Personally delinquent		0.644 (3.65)
Bankrupt past 3 years		1.184 (1.13)
Creditworthiness, Firm, and Owner Characteristics	No	Yes
Loan Characteristics	Yes	Yes
N	1,490	1,463
Adjusted R ²	.0831	.1046
F	11.4	11.05

Source: See Table 5.30.

Notes: (1) Reported estimates are OLS regression models, t-statistics are in parentheses. (2) Five indicators for primary owner's education level, four indicators for legal form of organization, loan amount applied for, loan amount granted, and month and year of loan application were included. (3) Seven additional indicators for jurisdiction were also included.

K. Conclusions and Results from More Recent Analyses

The results presented in this chapter indicate that African American-owned firms face serious obstacles in obtaining credit that are unrelated to their creditworthiness, industry, or geographic location. In a number of cases this is true as well for Hispanic-owned firms, Asian/Pacific Islander-owned firms, Native American-owned firms, and nonminority female-owned firms.

As in any regression-based study, our analysis hinges upon the proposition that all of the factors that are related to loan denial rates have been included in our statistical model. If, for example,

African American business owners possess some unobservable characteristic that makes them less creditworthy, then our statistical finding would overstate the difference in loan denial rates. To check on this possibility, the models we have estimated include an extensive array of factors that could conceivably affect loan decisions. Additionally, we have also estimated several alternative specifications that could potentially identify the impact of such a bias. Moreover, we have conducted our own surveys on numerous occasions and in numerous places across the U.S. Throughout, we have consistently found that African Americans are disadvantaged in the small business credit market and that our specification tests support the interpretation of discrimination.

Another potential criticism is that this study has examined loan denial rates rather than loan default rates; some have claimed that the latter provides a more appropriate strategy for identifying discrimination. For example, if banks only approve loans for relatively good African American firms then African American firms should exhibit relatively low default rates. Such an approach has several significant shortcomings that are detailed in Browne and Tootell (1995) and Ladd (1998). For instance, one problem is that it relies on the distribution of default probabilities being similar for African American and nonminority applicants meeting the acceptance standard used for nonminority firms. A further problem is that it assumes that the loan originators know with a high degree of precision what determines defaults; however, little hard information exists on what causes default. Additionally, it would be hard to disentangle the factors associated with differences in default rates between nonminority- and African American-owned firms given the fact that the African American-owned firms that obtain credit are typically charged higher interest rates, as we have demonstrated. Finally, such an analysis would require longitudinal data, tracking firms for several years following loan origination. Such data do not exist. While we have highlighted the potential limitations of such an analysis, we believe that it would be fruitful for this sort of longitudinal data collection to take place and for future research to investigate this question more fully.

In addition, many of the criticisms levied against the home mortgage loan discrimination study of Munnell, et al. (1996) could perhaps be used here as well. Yet these criticisms appear to have been effectively countered by, for example, Browne and Tootell (1995) and Tootell (1996). What is important to keep in mind in reference to this work compared with Munnell, et al. (1996), is the magnitude of the estimated racial disparity. The absolute size of the raw racial differences found in the mortgage study are considerably smaller than those observed in this study regarding business credit.¹⁵³

The magnitude of the racial difference in small business loan approval rates is substantial, even after controlling for observed differences in creditworthiness, and considerably larger than that found in the analysis of discrimination in mortgage markets. Why do the results for small business loans differ so markedly from those obtained from mortgage loans? First, many mortgages are sold in the secondary market and a substantial fraction of mortgage lenders have little intention of keeping the loans they make. This added “distance” in the transaction might

¹⁵³ In the Boston Fed study, 10 percent of White mortgage applications were rejected compared with 28 percent for African Americans. Loan denial rates (weighted) for business credit in this study ranged from 8.3 to 26.2 percent for White males and between 50.0 and 65.9 percent for African American-owned firms (depending on which NSSBF or SSBF survey is used).

reduce the likelihood of discrimination. As Day and Liebowitz (1998, p. 6) point out, “economic self-interest, therefore, should reduce racial discrimination in this market more completely than in many others.” A highly sophisticated secondary market for loans to small firms does not exist. Second, the presence of special programs and regulatory incentives to encourage banks and others to increase their mortgage lending to minorities gives these groups some advantages in obtaining a mortgage.

Clearly, a portion of the difference in denial rates between nonminority males and other groups in both types of studies appears to be due to differences in the characteristics of the applicants. Even after controlling for these differences, however, the gap in denial rates in the small business credit market is considerably larger than that found in the mortgage market.¹⁵⁴

Our analysis finds significant evidence that African American-owned businesses face impediments to obtaining credit that go beyond observable differences in their creditworthiness. These firms are more likely to report that credit availability was a problem in the past and expect it to be a problem in the future. In fact, these concerns prevented more African American-owned firms from applying for loans because they feared being turned down due to prejudice or discrimination. We also found that loan denial rates are significantly higher for African American-owned firms than for nonminority male-owned firms even after taking into account differences in an extensive array of measures of creditworthiness and other characteristics. This result appears to be largely insensitive to geographic location or to changes in econometric specification. Comparable findings are observed for other minority business owners and for nonminority women as well, although not with as much consistency as the findings for African Americans.

Overall, the evidence is consistent that African American-owned firms and other M/WBE firms face large and statistically significant disadvantages in the market for small business credit. The larger size and significance of the effects found in our analyses (compared to mortgage market analyses) significantly reduces the possibility that the observed differences can be explained away by some quirk of the econometric estimation procedure and, instead, strongly suggests that the observed differences are due to discrimination.

As noted above, the Federal Reserve discontinued the SSBF as of 2003 and the most recent NERA survey on the topic was conducted in 2007. Economist Alicia Robb, in her article “Beyond the Late, Lamented Survey of Small Business Finance,”¹⁵⁵ notes:

“A few years ago, the [SSBF], the main source of data on small business financing, was cancelled by the Federal Reserve Board. The SSBF had provided detailed information on the use of credit and other financial services by small businesses every five years beginning in 1987. There are no data available after 2003. The Federal Reserve stated the survey was cancelled for financial reasons and the survey had been conducted four times

¹⁵⁴ The gap in denial rates between African Americans and nonminorities with similar characteristics is between 34-46 percentage points in the small business credit market compared with 7 percentage points in the mortgage market.

¹⁵⁵ Robb, A. (2010).

in varying economic conditions. Yet, less than a year after the cancellation, the worst financial crisis hit the United States since the Great Depression. Unfortunately, the nation now has no demand-side data to investigate the impact of this financial crisis on small business financing or firm performance. It is ironic that a survey that could shed light on the impact of a financial crisis on the state of small business financing was cancelled due to budgetary concerns when the government has spent hundreds of billions of dollars on other matters arising from the crisis. The survey cost about \$6 million dollars over a five-year survey period, more of a rounding error to the Fed than a significant investment. What a pity that we have no data for 2008—a year of great interest for policy purposes.”

Given this, what, if anything, can we say about evidence of M/WBE disparities in access to capital and credit since the 2003-2007 Period? Although adverse impact of the loss of the SSBF cannot be overstated, Dr. Robb herself has endeavored to partially fill the void using data from a unique data set known as the Kauffman Firm Survey (KFS), which follows a sample of small businesses from 2004 through 2010, as well as other sources.

Key findings from Dr. Robb’s 2012 article entitled “Access to Capital among Young Firms, Minority-owned Firms, Women-owned Firms, and High-tech Firms,”¹⁵⁶ include the following:

- Differences in asset levels are the largest single factor explaining racial disparities in business creation rates. Half of all Hispanic families in 2004 had less than \$13,375 in wealth and half of all African American families in 2004 had less than \$8,650 in wealth. These figures were 12 percent and 8 percent, respectively, of nonminority wealth levels.
- Research indicates that the level of startup capital is a strong predictor of business success.
- There is evidence that during times of financial distress, bank lending is curtailed, especially to firms that are inherently more risky, such as minority-owned and women-owned firms.
- During 2007-2010, young firms owned by African Americans, Hispanics, and other minorities (except Asians) were statistically significantly less likely than similarly situated nonminority firms to apply for credit when they needed it for fear of denial. Dr. Robb notes: “This is perhaps the clearest recent evidence of continued borrowing constraints for Black and Hispanic business owners in the United States. Women were also more likely than men to have this fear during the economic crisis.”
- During 2007-2010, when they did apply for credit, African American, Hispanic, and other young minority firms were statistically significantly more likely to have their loans denied than nonminority owned firms with comparable levels of creditworthiness.
- Moreover, the magnitude of minority denials “increased dramatically” during the 2007-2010 period and through the financial crisis.

¹⁵⁶ Robb, A. (2012).

- Women-owned firms were also more likely to be denied than nonminority male firms with comparable creditworthiness levels in three of the four years studied, though the difference was only statistically significant in 2008.

Dr. Robb concludes:¹⁵⁷

“The multivariate findings indicate that ... minority owners who did not apply for new loans were significantly more likely than their White counterparts to avoid applying for loans when needed because they were afraid that their loan applications would be declined by lenders. This is even after controlling for credit quality and a host of owner and firm characteristics. Women were also more likely than similar men not to apply for credit when it was needed for fear of having their loan application denied during the years of the economic crisis. The analysis showed that women and minority business owners’ fears of being declined for a loan were not necessarily unwarranted. In particular, in terms of loan application outcomes, even after controlling for such factors as industry, credit score, legal form, and human capital, minority owners of young firms were significantly less likely to have their loan applications approved than were similar White business owners. Similarly, in 2008, women owners of new businesses were significantly less likely than men with similar credit profiles and legal forms of organization to be approved for loans. More generally, the results suggest that in the initial year of startup, Black- and Hispanic-owned businesses faced greater credit constraints than did their White and Asian counterparts. Similarly, women-owned businesses faced greater credit constraints than did similar startups owned by men during the years of the financial crisis.”

Dr. Robb’s findings are consistent with those reported above from the SSBF and from NERA’s own surveys. There is no evidence to suggest that credit discrimination has lessened in the years since 2007. Indeed the available evidence suggests that credit discrimination has continued and, if anything, worsened during the recent financial crisis.

¹⁵⁷ *Ibid.*

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VI. M/WBE Utilization and Disparity in City of Austin Contracting Activity

A. Introduction

The *Croson* decision and its progeny have held that statistical evidence of race-based or gender-based disparities in business enterprise activity is a requirement for any state or local entity that desires to establish or maintain race-conscious or gender-conscious requirements for M/WBE participation in contracting and procurement.¹⁵⁸ Chapters IV and V documented several specific disparities facing minority- and women-owned firms in the private sector of the City of Austin's market area, where contracting and procurement activity is generally *not* subject to such requirements.¹⁵⁹ In this chapter, we combined the evidence from Chapter III, which estimates M/WBE and VOB/SDVOB availability in the City of Austin Market Area, with the Master Contract/Subcontract Database described in Chapter II, in order to examine whether there is statistical evidence of disparities in the City of Austin's own contracting activity.

The statistical evidence reported in Chapter II has already established from which specific industries the City of Austin procures goods and services from as well as from which geographic areas it draws the majority of its prime contractors and subcontractors. In addition, the statistical evidence reported in Chapter III has established what percentage of all firms in the City of Austin's geographic and product markets are M/WBEs and VOBs/SDVOBs.

To determine whether M/WBEs have been underutilized at the City of Austin, we should ideally examine public expenditures that were *not* subject to subcontracting goals. The City of Austin has a long and well established policy of setting subcontracting goals on many of its contracting activities, particularly in the areas of Construction and Professional Services. Given this, the data on City of Austin contracts with subcontracting goals may not show evidence of underutilization, even if such underutilization exists in the private sector of Austin's relevant market area. Instead, the data on such contracts is most informative for examining the effectiveness of the City's M/WBE policies during the study time period.

However, as seen below, during the study period there were many City of Austin contracts on which subcontracting goals were not established. In Commodities, subcontract opportunities are often highly constrained. Outside of Commodities, however, we also observed a substantial number of contracts on which no subcontracting goals were established. This was observed in Construction, Professional Services, and Nonprofessional services, and was especially evident in Nonprofessional Services.

If City of Austin M/WBE utilization is still significantly less than M/WBE availability, particularly on such contracts on which no subcontracting goals were established, then that data

¹⁵⁸ As discussed in Appendix B, "veteran-conscious" requirements would presumably be subjected to a less strict standard of constitutional review than would race- or gender-conscious requirements.

¹⁵⁹ Chapter IV also examined the extent of such disparities for veterans and service-disabled veterans. Unfortunately, none of the data sources relied upon in Chapter V contained specific information on veterans.

would be consistent with the persistence of discrimination, in conjunction with the private sector data examined in Chapters IV and V.

This chapter, therefore, will document:

- To what extent have M/WBEs been utilized in the contracting and subcontracting activities of the City of Austin during the study period.
- To what extent have VOBs and SDVOBs been utilized in the contracting and subcontracting activities of the City of Austin during the study period.
- To what extent there is a disparity between M/WBEs utilization and M/WBE availability in the relevant market area.
- To what extent there is a disparity between VOB/SDVOB utilization and VOB/SDVOB availability in the relevant market area.
- Whether M/WBE utilization and disparity ratios differ between contracts where M/WBE goals were established and contracts where such goals were not established.

The M/WBE, VOB and SDVOB utilization results below are reported using two different, but related, measures—dollars awarded and dollars paid. We report this information for Construction, Professional Services, Nonprofessional Services, Commodities, and for all four categories combined. Results for M/WBEs are reported by race and gender as well as for minorities as a group and for all minorities and women combined.

B. M/WBE Utilization for All Contracting Dollars

For this Study, we examined 3,934 prime contracts or purchase orders and 9,533 associated subcontracts active during fiscal 2008-2013. These contracts and purchases had a total award value of \$4.94 billion and a total paid value of \$4.22 billion.¹⁶⁰

NAICS codes, M/WBE status, and detailed race and gender status for the prime contractors and subcontractors included in the Master Contract/Subcontract Database were established through extensive computer-assisted cross-referencing of firms in our database with firms in (a) the City of Austin certified M/WBE directory, (b) the State of Texas certified HUB directory, (c) the Texas UCP DBE directory, (d) the master directory of M/WBEs assembled for this study, (e) Dun & Bradstreet, (f) company profiles drawn from Hoover's, American Business Information, Standard & Poor's, and other sources, and (g) the results of our race/gender misclassification/non-classification surveys.

¹⁶⁰ Payments on contracts that were not substantially complete at the time of the Study data collection were excluded from the paid dollar totals.

1. Utilization Across All Contracts

From Tables 6.1 and 6.2 we see that, as a group during the study period, M/WBEs were awarded 23.76 percent and paid 24.95 percent of all contract and subcontract dollars in Construction; awarded 31.43 percent and paid 33.35 percent of all contract and subcontract dollars in Professional Services; awarded 13.66 percent and paid 14.03 percent of all contract and subcontract dollars in Nonprofessional Services; and awarded 10.48 percent and paid 10.24 percent of all contract and subcontract dollars in Commodities. Altogether, M/WBEs were awarded 18.13 percent and paid 18.75 percent of all contract and subcontract dollars during the study period. Among M/WBEs, firms owned by Hispanics were awarded the largest fraction of contracting and subcontracting dollars (both awarded and paid), followed in descending order by firms owned by nonminority females, African Americans, Asians/Pacific Islanders and Native Americans.

Non-M/WBEs were awarded and paid the vast majority of contract and subcontract dollars—approximately 76 percent of all Construction dollars, 68 percent of all Professional Services dollars, 86 percent of all Nonprofessional Services dollars, 90 percent of all Commodities dollars, and 82 percent of dollars overall.

Table 6.1. M/WBE Utilization at the City of Austin—All Contracts (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.67	3.24	1.88	1.11	1.82
Hispanic	13.73	11.60	3.27	6.09	8.01
Asian/Pacific Islander	1.64	5.66	2.92	0.31	2.30
Native American	0.03	0.02	0.10	0.21	0.09
Minority Total	17.07	20.53	8.17	7.72	12.23
Nonminority female	6.68	10.90	5.49	2.76	5.90
M/WBE Total	23.76	31.43	13.66	10.48	18.13
Non-M/WBE Total	76.24	68.57	86.34	89.52	81.87
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,418,347,835	643,671,866	1,729,836,803	1,151,098,221	4,942,954,725
Total Prime Contracts	475	479	1,440	1,540	3,934
Total Subcontracts	4,820	2,693	2,020	0	9,533

Source: NERA Master Contract/Subcontract Database, 2008-2013.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Table 6.2. M/WBE Utilization at the City of Austin—All Contracts (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.49	3.70	1.91	1.19	1.84
Hispanic	15.30	12.63	3.51	5.54	8.61
Asian/Pacific Islander	1.62	5.63	3.04	0.26	2.27
Native American	0.03	0.02	0.13	0.16	0.09
Minority Total	18.44	21.98	8.58	7.15	12.81
Nonminority female	6.52	11.37	5.45	3.10	5.94
M/WBE Total	24.95	33.35	14.03	10.24	18.75
Non-M/WBE Total	75.05	66.65	85.97	89.76	81.25
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,230,402,467	538,903,507	1,412,133,147	1,038,323,711	4,219,762,832
Total Prime Contracts	441	405	1,306	1,381	3,533
Total Subcontracts	4,451	2,306	1,754	0	8,511

Source and Notes: See Table 6.1.

2. Contracts With Goals versus Contracts Without Goals

Table 6.3 shows M/WBE utilization results, measured by dollars awarded, for City of Austin contracts during the study period for which M/WBE goals were established. Table 6.4 shows comparable information for contracts for which no M/WBE goals were established.

According to City records, of the 475 prime contracts awarded in Construction during the study period, 309 had M/WBE goals established for them (65.1%) and 166 did not (34.9%).¹⁶¹ Construction contracts with goals accounted for 67.8 percent of total dollars awarded. Those without goals accounted for 32.2 percent.

In Professional Services, 479 prime contracts were awarded during the study period. Of these, 151 had M/WBE goals established for them (31.5%) and 328 did not (68.5%). Professional Services contracts with goals accounted for 24.9 percent of total dollars awarded. Those without goals accounted for 75.1 percent.

In Nonprofessional Services, 1,440 prime contracts were awarded during the study period. Of these, 26 had M/WBE goals established for them (1.8%) and 1,414 did not (98.2%). Nonprofessional Services contracts with goals accounted for 5.5 percent of total dollars awarded. Those without goals accounted for 94.5 percent.

In Commodities, 1,540 prime contracts were awarded during the study period. Of these, 8 had M/WBE goals established for them (0.5%) and 1,532 did not (99.5%). Commodities contracts with goals accounted for 1.0 percent of total dollars awarded. Those without goals accounted for 99.0 percent.

Overall, 3,934 prime contracts were awarded during the study period, of which 494 had M/WBE goals (12.6%). These contracts with M/WBE goals had a total award value of \$1.23 billion, or 24.8 percent of all prime contract dollars awarded. Conversely, City records indicate that 3,440 prime contracts (87.4% of all prime contracts) did not have M/WBE goals established. These contracts had a total award value of \$3.71 billion, or 75.2 percent of all prime contract dollars awarded.

¹⁶¹ A small number of contracts on which DBE goals, rather than M/WBE goals, were established are included in the category of contracts with goals established.

Table 6.3. M/WBE Utilization at the City of Austin—Contracts with M/WBE Goals (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.89	3.75	2.93	0.00	2.19
Hispanic	15.50	12.82	8.89	9.76	14.58
Asian/Pacific Islander	1.69	9.28	4.89	0.00	2.91
Native American	0.03	0.07	0.00	0.00	0.03
Minority Total	19.11	25.92	16.71	9.76	19.72
Nonminority female	7.87	16.26	5.14	0.00	8.68
M/WBE Total	26.99	42.18	21.85	9.76	28.40
Non-M/WBE Total	73.01	57.82	78.15	90.24	71.60
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	961,240,680	159,962,657	95,180,739	11,918,012	1,228,302,089
Total Contracts	309	151	26	8	494
Total Subcontracts	3,949	896	265	0	5,110

Source: NERA Master Contract/Subcontract Database, 2008-2013.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Table 6.4. M/WBE Utilization at the City of Austin—Contracts without M/WBE Goals (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.21	3.08	1.82	1.12	1.69
Hispanic	10.01	11.20	2.94	6.06	5.84
Asian/Pacific Islander	1.54	4.47	2.80	0.31	2.10
Native American	0.02	0.00	0.11	0.21	0.12
Minority Total	12.78	18.74	7.67	7.70	9.75
Nonminority female	4.18	9.13	5.51	2.79	4.98
M/WBE Total	16.96	27.87	13.18	10.49	14.73
Non-M/WBE Total	83.04	72.13	86.82	89.51	85.27
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	457,107,154	483,709,209	1,634,656,065	1,139,180,208	3,714,652,636
Total Contracts	166	328	1,414	1,532	3,440
Total Subcontracts	871	1,797	1,755	0	4,423

Source: NERA Master Contract/Subcontract Database, 2008-2013.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

A comparison of Tables 6.3 and 6.4 shows that M/WBE utilization is substantially higher for contracts where M/WBE goals are established than for contracts where such goals are not established. Table 6.3 shows M/WBE utilization (in terms of dollars awarded) on contracts *with* M/WBE goals, whereas Table 6.4 shows comparable results for contracts *without* M/WBE goals. Overall, M/WBE participation on City contracts with M/WBE goals was 28.40 percent. On contracts without goals, it was just 14.73 percent.

For African Americans, overall participation was 30 percent greater on contracts with goals compared to contracts without goals (2.19% vs. 1.69%). For Hispanics, overall participation was 150 percent greater on contracts with goals compared to contracts without goals (14.58% vs. 5.84%). For Asians/Pacific Islanders, overall participation was 39 percent greater on contracts with goals compared to contracts without goals (2.91% vs. 2.10%). For minorities as a group, overall participation was 102 percent greater on contracts with goals compared to contracts without goals (19.72% vs. 9.75%). For nonminority women, overall participation was 74 percent greater on contracts with goals compared to contracts without goals (8.68% vs. 4.98%).¹⁶²

With the exception of Commodities, where an insignificant number of contracts had M/WBE goals established, these results generally hold true across the major procurement categories as well. In Construction, the differences, though smaller, are still apparent. Participation for minorities as a group was 19.11 percent on contracts with goals, compared to 12.78 percent on contracts without goals. For M/WBEs as a group, these figures are 26.99 percent and 16.96 percent, respectively. In Professional Services, participation for minorities as a group was 25.92 percent on contracts with M/WBE goals, compared to 18.74 percent on contracts without goals. For M/WBEs as a group, these figures are 42.18 percent and 27.87 percent, respectively. In Nonprofessional Services, participation for minorities as a group was 16.71 percent on contracts with M/WBE goals, compared to just 7.67 percent on contracts without goals. For M/WBEs as a group, these figures are 21.85 percent and 13.18 percent, respectively.

Turning to paid dollars and substantially completed contracts, Tables 6.5 and 6.6 show that of the 441 prime contracts in Construction during the study period, 284 had M/WBE goals established for them (64.4%) and 157 did not (35.6%). Construction contracts with goals accounted for 66.8 percent of total dollars awarded. Those without goals accounted for 33.2 percent.

In Professional Services, there were 405 prime contracts substantially completed during the study period. Of these, 124 had M/WBE goals established for them (30.6%) and 281 did not (69.4%). Professional Services contracts with goals accounted for 25.1 percent of total dollars awarded. Those without goals accounted for 74.9 percent.

¹⁶² The only group for which this result did not hold true was Native Americans, with 0.03 percent participation on contracts with goals versus 0.12 percent on contracts without goals. A t-test shows that these two percentages are not statistically significantly different from each other.

Table 6.5. M/WBE Utilization at the City of Austin—Contracts with M/WBE Goals (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.66	4.02	2.30	0.00	1.99
Hispanic	16.55	13.87	9.14	9.85	15.55
Asian/Pacific Islander	1.72	9.55	3.90	0.00	2.88
Native American	0.03	0.07	0.00	0.00	0.03
Minority Total	19.97	27.52	15.34	9.85	20.46
Nonminority female	7.58	16.00	5.09	0.00	8.38
M/WBE Total	27.54	43.51	20.43	9.85	28.84
Non-M/WBE Total	72.46	56.49	79.57	90.15	71.16
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	822,053,563	135,349,268	82,718,827	11,814,459	1,051,936,118
Total Contracts	284	124	23	8	439
Total Subcontracts	3,647	748	237	0	4,632

Source and Notes: See Table 6.1.

Table 6.6. M/WBE Utilization at the City of Austin—Contracts without M/WBE Goals (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	1.15	3.59	1.88	1.20	1.79
Hispanic	12.77	12.21	3.16	5.49	6.30
Asian/Pacific Islander	1.40	4.32	2.98	0.26	2.07
Native American	0.03	0.00	0.13	0.16	0.11
Minority Total	15.35	20.12	8.16	7.11	10.27
Nonminority female	4.38	9.82	5.47	3.13	5.13
M/WBE Total	19.73	29.94	13.63	10.25	15.40
Non-M/WBE Total	80.27	70.06	86.37	89.75	84.60
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	408,348,903	403,554,238	1,329,414,320	1,026,509,252	3,167,826,713
Total Contracts	157	281	1,283	1,373	3,094
Total Subcontracts	804	1,558	1,517	0	3,879

Source and Notes: See Table 6.1.

In Nonprofessional Services, 1,306 prime contracts were substantially completed during the study period. Of these, 23 had M/WBE goals established for them (1.8%) and 1,283 did not (98.2%). Nonprofessional Services contracts with goals accounted for 5.9 percent of total dollars awarded. Those without goals accounted for 94.1 percent.

In Commodities, 1,381 prime contracts were substantially completed during the study period. Of these, 8 had M/WBE goals established for them (0.6%) and 1,373 did not (99.4%). Commodities contracts with goals accounted for 1.1 percent of total dollars awarded. Those without goals accounted for 98.9 percent.

Overall, 3,533 prime contracts were substantially completed during the study period, of which 439 had M/WBE goals (12.4%). These contracts had a total paid value of \$1.05 billion, or 24.9 percent of all prime contract dollars paid. Conversely, City records indicate that 3,094 prime contracts (87.6% of all prime contracts) did not have M/WBE goals established. These contracts had a total award value of \$3.17 billion, or 75.1 percent of all prime contract dollars paid.

Tables 6.5 and 6.6 present statistics comparable to those in Tables 6.3 and 6.4 using dollars paid as the measure of utilization rather than dollars awarded. The results are very similar across both sets of tables. Table 6.5 shows M/WBE utilization (in terms of dollars paid) on contracts with M/WBE goals, whereas Table 6.6 shows comparable results for contracts without M/WBE goals. Overall, M/WBE participation on City contracts with M/WBE goals was 28.84 percent. On contracts without goals, it was just 15.40 percent.

For African Americans, overall participation was 11 percent greater on contracts with goals compared to contracts without goals (1.99% vs. 1.79%). For Hispanics, overall participation was 147 percent greater on contracts with goals compared to contracts without goals (15.55% vs. 6.30%). For Asians/Pacific Islanders, overall participation was 39 percent greater on contracts with goals compared to contracts without goals (2.88% vs. 2.07%). For minorities as a group, overall participation was 99 percent greater on contracts with goals compared to contracts without goals (20.46% vs. 10.27%). For nonminority women, overall participation was 63 percent greater on contracts with goals compared to contracts without goals (8.38% vs. 5.13%).¹⁶³

As with the results measured by dollars awarded, these findings generally hold true across the major procurement categories as well (other than Commodities). In Construction, participation for minorities as a group was 19.97 percent on contracts with goals, compared to 15.35 percent on contracts without goals. For M/WBEs as a group, these figures are 27.54 percent and 19.73 percent, respectively. In Professional Services, participation for minorities as a group was 27.52 percent on contracts with M/WBE goals, compared to 20.12 percent on contracts without goals. For M/WBEs as a group, these figures are 43.51 percent and 29.94 percent, respectively. In Nonprofessional Services, participation for minorities as a group was 15.34 percent on contracts with M/WBE goals, compared to just 8.16 percent on contracts without goals. For M/WBEs as a group, these figures are 20.43 percent and 13.63 percent, respectively.

¹⁶³ The only group for which this result did not hold true was Native Americans, with 0.03 percent participation on contracts with goals versus 0.11 percent on contracts without goals. A t-test shows that these two percentages are not statistically significantly different from each other.

Table 6.7 shows City of Austin prime contract activity during the study period by department, disaggregated according to contracts with and without M/WBE goals.¹⁶⁴

Table 6.7. Prime Contracts, by City Department, with and without M/WBE Goals

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
CONSTRUCTION	Y	309	961,240,680	822,053,563
CONSTRUCTION	N	166	457,107,154	408,348,903
AUSTIN CONVENTION CENTER	Y	5	5,312,258	5,222,028
AUSTIN CONVENTION CENTER	N	1	985,182	985,182
AUSTIN ENERGY	Y	13	43,291,508	42,754,567
AUSTIN ENERGY	N	14	72,360,732	69,747,032
AUSTIN RESOURCE RECOVERY	Y	4	9,240,644	9,173,313
AUSTIN RESOURCE RECOVERY	N	4	709,906	709,906
AUSTIN WATER UTILITY	Y	118	440,691,932	402,707,830
AUSTIN WATER UTILITY	N	39	162,760,423	152,348,206
AVIATION	Y	17	38,737,324	38,329,131
AVIATION	N	3	1,421,264	1,419,264
CODE COMPLIANCE	Y	0	-	-
CODE COMPLIANCE	N	1	61,500	61,500
EMERGENCY MEDICAL SERVICES	Y	1	2,087,653	2,075,909
EMERGENCY MEDICAL SERVICES	N	0	-	-
FINANCIAL SERVICES	Y	3	3,163,792	3,163,791
FINANCIAL SERVICES	N	10	80,308,595	79,978,630
FIRE	Y	3	4,408,577	4,408,577
FIRE	N	0	-	-
FLEET MAINTENANCE	Y	0	-	-
FLEET MAINTENANCE	N	1	68,100	68,100
HEALTH & HUMAN SERVICES	Y	1	12,135,384	11,528,615
HEALTH & HUMAN SERVICES	N	0	-	-
LIBRARY	Y	2	3,644,479	3,644,479
LIBRARY	N	2	229,201	229,201

¹⁶⁴ See also Table 2.4.

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	Y	1	2,369,718	2,369,718
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	N	33	15,545,442	10,934,433
PARKS & RECREATION	Y	12	26,829,415	21,479,827
PARKS & RECREATION	N	11	15,697,211	15,523,622
PLANNING AND DEVELOPMENT REVIEW	Y	1	2,036,057	2,036,057
PLANNING AND DEVELOPMENT REVIEW	N	0	-	-
POLICE	Y	0	-	-
POLICE	N	1	241,741	186,801
PUBLIC WORKS - TRANSPORTATION	Y	46	145,111,833	121,706,195
PUBLIC WORKS - TRANSPORTATION	N	23	33,764,594	32,408,795
STREET LIGHTING	Y	38	85,314,402	32,376,247
STREET LIGHTING	N	16	32,099,262	30,951,598
TRANSPORTATION, PLANNING & SUSTAINABILITY	Y	6	8,399,083	7,532,348
TRANSPORTATION, PLANNING & SUSTAINABILITY	N	1	300,828	278,740
WATERSHED PROTECTION & DEVELOPMENT REVIEW	Y	38	128,466,624	111,544,931
WATERSHED PROTECTION & DEVELOPMENT REVIEW	N	5	31,400,673	3,540,791
WIRELESS COMMUNICATIONS	Y	0	-	-
WIRELESS COMMUNICATIONS	N	1	9,152,500	8,977,102

Table 6.7. Prime Contracts, by City Department, with and without M/WBE Goals, cont'd

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
PROFESSIONAL SERVICES	Y	151	159,962,657	135,349,268
PROFESSIONAL SERVICES	N	328	483,709,209	403,554,238
AUSTIN CONVENTION CENTER	Y	1	300,000	272,346
AUSTIN CONVENTION CENTER	N	2	15,858,978	15,018,503
AUSTIN ENERGY	Y	2	11,328,987	10,072,311
AUSTIN ENERGY	N	3	3,421,012	3,063,997
AUSTIN RESOURCE RECOVERY	Y	1	1,175,940	1,154,325
AUSTIN RESOURCE RECOVERY	N	1	1,160,240	1,160,240
AUSTIN WATER UTILITY	Y	15	38,065,424	30,093,700
AUSTIN WATER UTILITY	N	35	251,886,224	217,837,600
AVIATION	Y	1	1,701,754	1,701,754
AVIATION	N	4	4,169,563	4,080,564
ECONOMIC DEVELOPMENT	Y	0	-	-
ECONOMIC DEVELOPMENT	N	7	1,962,267	1,810,397
FINANCIAL SERVICES	Y	1	14,478,646	14,478,646
FINANCIAL SERVICES	N	102	80,213,983	77,727,527
FLEET MAINTENANCE	Y	0	-	-
FLEET MAINTENANCE	N	1	1,263,731	1,263,731
HEALTH & HUMAN SERVICES	Y	1	1,738,827	1,648,122
HEALTH & HUMAN SERVICES	N	1	155,441	132,240
HUMAN RESOURCES	Y	0	-	-
HUMAN RESOURCES	N	1	767,000	-
LAW	Y	0	-	-
LAW	N	14	5,670,826	1,232,123
MUNICIPAL COURT	Y	0	-	-
MUNICIPAL COURT	N	1	478,691	454,107
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	Y	1	461,048	415,613
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	N	1	260,929	256,831
PARKS & RECREATION	Y	2	3,958,510	3,865,788
PARKS & RECREATION	N	4	4,077,745	3,849,409

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
PLANNING AND DEVELOPMENT REVIEW	Y	0	-	-
PLANNING AND DEVELOPMENT REVIEW	N	3	2,261,788	2,148,138
POLICE	Y	0	-	-
POLICE	N	3	568,188	568,188
PUBLIC WORKS - TRANSPORTATION	Y	0	-	-
PUBLIC WORKS - TRANSPORTATION	N	4	3,920,620	3,777,123
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	Y	0	-	-
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	N	2	2,414,729	603,550
STREET LIGHTING	Y	122	82,912,103	68,112,890
STREET LIGHTING	N	125	92,887,594	58,809,298
TRANSPORTATION, PLANNING & SUSTAINABILITY	Y	2	1,584,723	1,321,971
TRANSPORTATION, PLANNING & SUSTAINABILITY	N	8	3,719,486	3,708,881
WATERSHED PROTECTION & DEVELOPMENT REVIEW	Y	2	2,256,695	2,211,802
WATERSHED PROTECTION & DEVELOPMENT REVIEW	N	6	6,590,173	6,051,793

Table 6.7. Prime Contracts, by City Department, with and without M/WBE Goals, cont'd

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
NONPROFESSIONAL SERVICES	Y	26	95,180,739	82,718,827
NONPROFESSIONAL SERVICES	N	1,414	1,634,656,065	1,329,414,320
AUSTIN CONVENTION CENTER	Y	0	-	-
AUSTIN CONVENTION CENTER	N	31	52,907,248	51,874,610
AUSTIN ENERGY	Y	5	11,346,121	10,590,879
AUSTIN ENERGY	N	233	302,086,703	270,342,455
AUSTIN RESOURCE RECOVERY	Y	0	-	-
AUSTIN RESOURCE RECOVERY	N	28	16,485,104	14,952,391
AUSTIN WATER UTILITY	Y	7	5,930,878	5,764,971
AUSTIN WATER UTILITY	N	70	38,996,638	28,897,759
AVIATION	Y	2	37,686,528	32,686,528
AVIATION	N	28	16,888,594	16,321,428
BUILDING SERVICES	Y	0	-	-
BUILDING SERVICES	N	3	261,487	-
CITY AUDITOR	Y	0	-	-
CITY AUDITOR	N	1	320,243	320,243
COMMUNICATIONS & PUBLIC INFORMATION	Y	0	-	-
COMMUNICATIONS & PUBLIC INFORMATION	N	2	493,648	431,872
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	Y	0	-	-
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	N	119	85,802,026	66,480,234
COMMUNITY CARE	Y	0	-	-
COMMUNITY CARE	N	8	7,857,164	7,421,914
ECONOMIC DEVELOPMENT	Y	0	-	-
ECONOMIC DEVELOPMENT	N	34	39,547,515	35,614,345
EMERGENCY MEDICAL SERVICES	Y	0	-	-
EMERGENCY MEDICAL SERVICES	N	5	3,731,928	3,665,239
FINANCIAL SERVICES	Y	2	24,223,124	24,207,736
FINANCIAL SERVICES	N	317	562,941,032	535,182,877
FIRE	Y	0	-	-
FIRE	N	4	810,431	807,961

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
FLEET MAINTENANCE	Y	1	165,712	148,336
FLEET MAINTENANCE	N	40	23,415,982	19,886,633
GOVERNMENTAL RELATIONS	Y	0	-	-
GOVERNMENTAL RELATIONS	N	15	1,747,463	1,724,960
HEALTH & HUMAN SERVICES	Y	0	-	-
HEALTH & HUMAN SERVICES	N	181	90,954,534	83,436,004
HUMAN RESOURCES	Y	0	-	-
HUMAN RESOURCES	N	39	103,501,694	94,356,238
LAW	Y	0	-	-
LAW	N	5	651,665	619,723
LIBRARY	Y	0	-	-
LIBRARY	N	12	11,804,706	2,532,706
MUNICIPAL COURT	Y	0	-	-
MUNICIPAL COURT	N	5	4,092,500	4,021,856
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	Y	0	-	-
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	N	94	39,709,326	38,188,924
PARKS & RECREATION	Y	1	1,050,798	1,050,798
PARKS & RECREATION	N	40	25,304,559	22,545,817
PLANNING AND DEVELOPMENT REVIEW	Y	0	-	-
PLANNING AND DEVELOPMENT REVIEW	N	6	1,094,291	1,090,856
POLICE	Y	0	-	-
POLICE	N	16	4,938,803	4,378,082
PUBLIC SAFETY & SECURITY	Y	0	-	-
PUBLIC SAFETY & SECURITY	N	1	71,181	71,181
PUBLIC WORKS - TRANSPORTATION	Y	0	-	-
PUBLIC WORKS - TRANSPORTATION	N	11	3,735,761	3,526,481
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	Y	0	-	-
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	N	3	530,866	506,634
STREET LIGHTING	Y	7	13,840,929	7,332,931
STREET LIGHTING	N	39	174,201,317	10,676,493

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
TRANSPORTATION, PLANNING & SUSTAINABILITY	Y	1	936,649	936,649
TRANSPORTATION, PLANNING & SUSTAINABILITY	N	3	3,923,204	1,865,352
WATERSHED PROTECTION & DEVELOPMENT REVIEW	Y	0	-	-
WATERSHED PROTECTION & DEVELOPMENT REVIEW	N	13	12,784,804	4,956,258
WIRELESS COMMUNICATIONS	Y	0	-	-
WIRELESS COMMUNICATIONS	N	8	3,063,648	2,716,791

Table 6.7. Prime Contracts, by City Department, with and without M/WBE Goals, cont'd

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
COMMODITIES	Y	8	11,918,012	11,814,459
COMMODITIES	N	1,532	1,139,180,208	1,026,509,252
AUSTIN CONVENTION CENTER	Y	0	-	-
AUSTIN CONVENTION CENTER	N	23	6,099,007	5,590,653
AUSTIN ENERGY	Y	1	356,826	293,946
AUSTIN ENERGY	N	345	358,156,990	317,125,677
AUSTIN RESOURCE RECOVERY	Y	0	-	-
AUSTIN RESOURCE RECOVERY	N	17	22,821,952	17,990,021
AUSTIN WATER UTILITY	Y	2	8,851,424	8,851,424
AUSTIN WATER UTILITY	N	150	64,482,601	61,334,369
AVIATION	Y	0	-	-
AVIATION	N	33	7,290,997	6,618,237
CITY CLERK	Y	0	-	-
CITY CLERK	N	2	320,491	165,680
CODE COMPLIANCE	Y	0	-	-
CODE COMPLIANCE	N	1	51,546	51,546
COMMUNICATIONS & PUBLIC INFORMATION	Y	0	-	-
COMMUNICATIONS & PUBLIC INFORMATION	N	1	52,800	52,800
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	Y	0	-	-
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	N	170	109,415,373	99,509,600
COMMUNITY CARE	Y	0	-	-
COMMUNITY CARE	N	7	1,891,943	1,871,525
CONTRACT & LAND MANAGEMENT	Y	0	-	-
CONTRACT & LAND MANAGEMENT	N	1	77,576	76,943
ECONOMIC DEVELOPMENT	Y	0	-	-
ECONOMIC DEVELOPMENT	N	2	146,123	71,571
EMERGENCY MEDICAL SERVICES	Y	0	-	-
EMERGENCY MEDICAL SERVICES	N	28	4,159,313	5,095,971

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
FINANCIAL SERVICES	Y	0	-	-
FINANCIAL SERVICES	N	213	175,779,899	157,239,644
FIRE	Y	0	-	-
FIRE	N	23	5,848,173	5,635,953
FLEET MAINTENANCE	Y	0	-	-
FLEET MAINTENANCE	N	283	263,903,197	232,395,841
HEALTH & HUMAN SERVICES	Y	0	-	-
HEALTH & HUMAN SERVICES	N	13	5,657,350	5,245,111
LIBRARY	Y	0	-	-
LIBRARY	N	16	16,556,339	15,942,185
PARKS & RECREATION	Y	0	-	-
PARKS & RECREATION	N	43	10,111,837	9,172,612
POLICE	Y	0	-	-
POLICE	N	50	14,712,953	13,682,322
PUBLIC WORKS - TRANSPORTATION	Y	2	1,743,412	1,743,412
PUBLIC WORKS - TRANSPORTATION	N	30	49,086,556	52,141,693
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	Y	0	-	-
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	N	10	763,694	659,127
STREET LIGHTING	Y	2	458,782	458,782
STREET LIGHTING	N	1	921,164	921,164
TRANSPORTATION	Y	0	-	-
TRANSPORTATION	N	25	8,007,472	5,446,170
WATERSHED PROTECTION & DEVELOPMENT REVIEW	Y	1	507,569	466,895
WATERSHED PROTECTION & DEVELOPMENT REVIEW	N	26	4,878,848	4,648,905
WIRELESS COMMUNICATIONS	Y	0	-	-
WIRELESS COMMUNICATIONS	N	19	7,986,015	7,823,931

Table 6.7. Prime Contracts, by City Department, with and without M/WBE Goals, cont'd

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
OVERALL	Y	494	1,228,302,089	1,051,936,118
OVERALL	N	3,440	3,714,652,636	3,167,826,713
AUSTIN CONVENTION CENTER	Y	6	5,612,258	5,494,374
AUSTIN CONVENTION CENTER	N	57	75,850,415	73,468,948
AUSTIN ENERGY	Y	21	66,323,441	63,711,702
AUSTIN ENERGY	N	595	736,025,437	660,279,161
AUSTIN RESOURCE RECOVERY	Y	5	10,416,584	10,327,638
AUSTIN RESOURCE RECOVERY	N	50	41,177,202	34,812,558
AUSTIN WATER UTILITY	Y	142	493,539,657	447,417,925
AUSTIN WATER UTILITY	N	294	518,125,886	460,417,934
AVIATION	Y	20	78,125,606	72,717,413
AVIATION	N	68	29,770,418	28,439,493
BUILDING SERVICES	Y	0	-	-
BUILDING SERVICES	N	3	261,487	-
CITY AUDITOR	Y	0	-	-
CITY AUDITOR	N	1	320,243	320,243
CITY CLERK	Y	0	-	-
CITY CLERK	N	2	320,491	165,680
CODE COMPLIANCE	Y	0	-	-
CODE COMPLIANCE	N	2	113,046	113,046
COMMUNICATIONS & PUBLIC INFORMATION	Y	0	-	-
COMMUNICATIONS & PUBLIC INFORMATION	N	3	546,448	484,672
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	Y	0	-	-
COMMUNICATIONS & TECHNOLOGY MANAGEMENT	N	289	195,217,398	165,989,833
COMMUNITY CARE	Y	0	-	-
COMMUNITY CARE	N	15	9,749,107	9,293,438
CONTRACT & LAND MANAGEMENT	Y	0	-	-
CONTRACT & LAND MANAGEMENT	N	1	77,576	76,943

M/WBE Utilization and Disparity in City of Austin Contracting Activity

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
ECONOMIC DEVELOPMENT	Y	0	-	-
ECONOMIC DEVELOPMENT	N	43	41,655,905	37,496,313
EMERGENCY MEDICAL SERVICES	Y	1	2,087,653	2,075,909
EMERGENCY MEDICAL SERVICES	N	33	7,891,241	8,761,211
FINANCIAL SERVICES	Y	6	41,865,562	41,850,173
FINANCIAL SERVICES	N	642	899,243,509	850,128,678
FIRE	Y	3	4,408,577	4,408,577
FIRE	N	27	6,658,604	6,443,914
FLEET MAINTENANCE	Y	1	165,712	148,336
FLEET MAINTENANCE	N	325	288,651,010	253,614,305
GOVERNMENTAL RELATIONS	Y	0	-	-
GOVERNMENTAL RELATIONS	N	15	1,747,463	1,724,960
HEALTH & HUMAN SERVICES	Y	2	13,874,211	13,176,737
HEALTH & HUMAN SERVICES	N	195	96,767,324	88,813,356
HUMAN RESOURCES	Y	0	-	-
HUMAN RESOURCES	N	40	104,268,694	94,356,238
LAW	Y	0	-	-
LAW	N	19	6,322,491	1,851,846
LIBRARY	Y	2	3,644,479	3,644,479
LIBRARY	N	30	28,590,246	18,704,092
MUNICIPAL COURT	Y	0	-	-
MUNICIPAL COURT	N	6	4,571,191	4,475,963
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	Y	2	2,830,766	2,785,331
NEIGHBORHOOD HOUSING & COMMUNITY DEVELOPMENT	N	128	55,515,697	49,380,188
PARKS & RECREATION	Y	15	31,838,723	26,396,413
PARKS & RECREATION	N	98	55,191,353	51,091,460
PLANNING AND DEVELOPMENT REVIEW	Y	1	2,036,057	2,036,057
PLANNING AND DEVELOPMENT REVIEW	N	9	3,356,079	3,238,995
POLICE	Y	0	-	-
POLICE	N	70	20,461,685	18,815,393

DEPARTMENT	GOALS? (Y/N)	NUMBER OF PRIME CONTRACTS	DOLLARS AWARDED (\$)	DOLLARS PAID (\$)
PUBLIC SAFETY & SECURITY	Y	0	-	-
PUBLIC SAFETY & SECURITY	N	1	71,181	71,181
PUBLIC WORKS - TRANSPORTATION	Y	48	146,855,245	123,449,608
PUBLIC WORKS - TRANSPORTATION	N	68	90,507,531	91,854,092
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	Y	0	-	-
PUBLIC WORKS CAPITAL PROJECT MANAGEMENT	N	15	3,709,289	1,769,311
STREET LIGHTING	Y	169	182,526,216	108,280,850
STREET LIGHTING	N	181	300,109,337	101,358,553
TRANSPORTATION	Y	0	-	-
TRANSPORTATION	N	25	8,007,472	5,446,170
TRANSPORTATION, PLANNING & SUSTAINABILITY	Y	9	10,920,455	9,790,968
TRANSPORTATION, PLANNING & SUSTAINABILITY	N	12	7,943,518	5,852,973
WATERSHED PROTECTION & DEVELOPMENT REVIEW	Y	41	131,230,887	114,223,629
WATERSHED PROTECTION & DEVELOPMENT REVIEW	N	50	55,654,498	19,197,748
WIRELESS COMMUNICATIONS	Y	0	-	-
WIRELESS COMMUNICATIONS	N	28	20,202,163	19,517,824

C. M/WBE Disparity Analysis for All Contracting Dollars

1. Results by Major Procurement Category

In this section, we compare our estimates of M/WBE utilization in City of Austin contracting and subcontracting activities to our estimates of M/WBE availability in the relevant geographic and product market area. Tables 6.8 and 6.9 present the results of this comparison for all prime contracts and purchase orders examined during the study period, using dollars awarded and dollars paid, respectively, as the metric of utilization. Tables 6.10 and 6.11 show comparable results for contracts on which M/WBE goals were established, and Tables 6.12 and 6.13 show results for contracts on which M/WBE goals were not established.

In each of these tables, the figures in the utilization column include both prime contract and subcontract dollars and were derived as described above in this chapter. The figures in the availability column were derived as described in Chapter III. The disparity ratio, which appears

in the final column of each table, is derived by dividing utilization by availability and then multiplying the result by 100. A disparity ratio below 100 indicates that M/WBEs did not participate in City of Austin contracting and subcontracting at a level that is consistent with their estimated availability in the relevant market area. A disparity ratio is said to be substantively significant, or large, if its value is approximately 80 or less. A disparity ratio is said to be statistically significant if it is unlikely to be caused by chance alone. In the tables below, statistical significance is indicated by one or more asterisks to the right of the disparity ratio.

When all procurement categories were combined, Tables 6.8 and 6.9 show that disparities were observed for firms owned by African Americans, Hispanics, Native Americans, minorities as a group, nonminority females, and M/WBEs as a group. These disparities were large for African Americans, Native Americans, nonminority females and M/WBEs as a group, and they were statistically significant for African Americans, Native Americans, nonminority females and M/WBEs as a group.

In Construction, large disparities were observed for firms owned by African Americans, Native Americans and nonminority females, and these disparities were statistically significant for African Americans, Native Americans and nonminority females. In Professional Services, large and statistically significant disparities were observed for firms owned by Native Americans. In Nonprofessional Services, large disparities were observed for firms owned by African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were statistically significant for African Americans, Hispanics, minorities as a group, nonminority females and M/WBEs as a group. In Commodities, which is the only major procurement area where it is generally not practical to set subcontracting goals (since subcontracting opportunities rarely exist on such contracts and purchases), large and statistically significant disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group.

Table 6.8. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—All Contracts (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.82	2.74	66.36 *
Hispanic	8.01	8.87	90.35
Asian/Pacific Islander	2.30	2.33	98.98
Native American	0.09	0.39	24.24 ****
Minority-owned	12.23	14.32	85.36
Nonminority female	5.90	10.87	54.27 ****
M/WBE total	18.13	25.20	71.95 ****
CONSTRUCTION			
African American	1.67	2.27	73.40
Hispanic	13.73	10.94	
Asian/Pacific Islander	1.64	1.14	
Native American	0.03	0.56	4.92 ****
Minority-owned	17.07	14.92	
Nonminority female	6.68	9.61	69.57 ****
M/WBE total	23.76	24.53	96.85
PROFESSIONAL SERVICES			
African American	3.24	1.60	
Hispanic	11.60	7.18	
Asian/Pacific Islander	5.66	2.81	
Native American	0.02	0.38	4.46 ****
Minority-owned	20.53	11.97	
Nonminority female	10.90	6.93	
M/WBE total	31.43	18.90	
NONPROFESSIONAL SERVICES			
African American	1.88	3.91	47.98 ****
Hispanic	3.27	8.95	36.51 ****
Asian/Pacific Islander	2.92	2.40	
Native American	0.10	0.30	34.91
Minority-owned	8.17	15.56	52.49 ****
Nonminority female	5.49	14.39	38.15 ****
M/WBE total	13.66	29.95	45.60 ****
COMMODITIES			
African American	1.11	1.74	63.83
Hispanic	6.09	8.28	73.62 ***
Asian/Pacific Islander	0.31	3.13	9.83 ****
Native American	0.21	0.42	49.39
Minority-owned	7.72	13.57	56.88 ****
Nonminority female	2.76	9.03	30.57 ****
M/WBE total	10.48	22.60	46.37 ****

Source: Calculations from NERA Master Contract/Subcontract Database and NERA Baseline Business Universe.

Notes: (1) “*” indicates an adverse disparity that is statistically significant at the 15% level or better (85% confidence). “***” indicates the disparity is significant at a 10% level or better (90% confidence). “****” indicates significance at a 5% level or better (95% confidence). “*****” indicates significance at a 1% level or better (99% confidence). (2) An empty cell in the Disparity Ratio column indicates that no adverse disparity was observed for that category.

Table 6.9. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—All Contracts (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.84	2.91	63.05 **
Hispanic	8.61	9.10	94.63
Asian/Pacific Islander	2.27	2.37	95.72
Native American	0.09	0.39	23.74 ****
Minority-owned	12.81	14.78	86.70
Nonminority female	5.94	11.20	53.01 ****
M/WBE total	18.75	25.98	72.17 ****
CONSTRUCTION			
African American	1.49	2.30	64.74 *
Hispanic	15.30	10.80	
Asian/Pacific Islander	1.62	1.11	
Native American	0.03	0.59	5.25 ****
Minority-owned	18.44	14.80	
Nonminority female	6.52	9.56	68.19 ****
M/WBE total	24.95	24.35	
PROFESSIONAL SERVICES			
African American	3.70	1.64	
Hispanic	12.63	7.54	
Asian/Pacific Islander	5.63	2.90	
Native American	0.02	0.40	4.60 ****
Minority-owned	21.98	12.49	
Nonminority female	11.37	6.74	
M/WBE total	33.35	19.22	
NONPROFESSIONAL SERVICES			
African American	1.91	4.33	44.08 ****
Hispanic	3.51	9.40	37.30 ****
Asian/Pacific Islander	3.04	2.50	
Native American	0.13	0.25	49.74
Minority-owned	8.58	16.49	52.02 ****
Nonminority female	5.45	15.48	35.23 ****
M/WBE total	14.03	31.96	43.89 ****
COMMODITIES			
African American	1.19	1.89	62.74 *
Hispanic	5.54	8.16	67.88 ***
Asian/Pacific Islander	0.26	3.16	8.26 ****
Native American	0.16	0.47	34.18 **
Minority-owned	7.15	13.68	52.24 ****
Nonminority female	3.10	9.20	33.66 ****
M/WBE total	10.24	22.88	44.77 ****

Source and Notes: See Table 6.8.

When the analysis is restricted just to those contracts on which M/WBE goals were established, fewer disparities are observed. For all procurement categories combined, Tables 6.10 and 6.11 show that large disparities were observed for firms owned by African Americans, Native Americans and nonminority females. These disparities were statistically significant for Native Americans. In Construction, large disparities were observed for firms owned by African Americans, Native Americans and nonminority females, and these disparities were statistically significant for Native Americans. In Professional Services, large and statistically significant disparities were observed for firms owned by Native Americans. In Nonprofessional Services, disparities were observed for African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were large and statistically significant for firms owned by African Americans, Native Americans, nonminority females and M/WBEs as a group. In Commodities, large and statistically significant disparities were observed for firms owned by African Americans, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group.

Table 6.10. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—Contracts with M/WBE Goals (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	2.19	2.74	80.13
Hispanic	14.58	8.87	
Asian/Pacific Islander	2.91	2.33	
Native American	0.03	0.39	8.22 ****
Minority-owned	19.72	14.32	
Nonminority female	8.68	10.87	79.82
M/WBE total	28.40	25.20	
CONSTRUCTION			
African American	1.89	2.27	83.07
Hispanic	15.50	10.94	
Asian/Pacific Islander	1.69	1.14	
Native American	0.03	0.56	5.27 ****
Minority-owned	19.11	14.92	
Nonminority female	7.87	9.61	81.97
M/WBE total	26.99	24.53	
PROFESSIONAL SERVICES			
African American	3.75	1.60	
Hispanic	12.82	7.18	
Asian/Pacific Islander	9.28	2.81	
Native American	0.07	0.38	17.96 ***
Minority-owned	25.92	11.97	
Nonminority female	16.26	6.93	
M/WBE total	42.18	18.90	
NONPROFESSIONAL SERVICES			
African American	2.93	3.91	74.94
Hispanic	8.89	8.95	99.27
Asian/Pacific Islander	4.89	2.40	
Native American	0.00	0.30	0.00 ****
Minority-owned	16.71	15.56	
Nonminority female	5.14	14.39	35.70 ****
M/WBE total	21.85	29.95	72.96 ****
COMMODITIES			
African American	0.00	1.74	0.00 ****
Hispanic	9.76	8.28	
Asian/Pacific Islander	0.00	3.13	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority-owned	9.76	13.57	71.94 **
Nonminority female	0.00	9.03	0.00 ****
M/WBE total	9.76	22.60	43.19 ****

Source and Notes: See Table 6.8.

Table 6.11. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—Contracts with M/WBE Goals (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.99	2.91	68.43
Hispanic	15.55	9.10	
Asian/Pacific Islander	2.88	2.37	
Native American	0.03	0.39	8.82 ****
Minority-owned	20.46	14.78	
Nonminority female	8.38	11.20	74.79
M/WBE total	28.84	25.98	
CONSTRUCTION			
African American	1.66	2.30	72.03
Hispanic	16.55	10.80	
Asian/Pacific Islander	1.72	1.11	
Native American	0.03	0.59	5.47 ****
Minority-owned	19.97	14.80	
Nonminority female	7.58	9.56	79.29
M/WBE total	27.54	24.35	
PROFESSIONAL SERVICES			
African American	4.02	1.64	
Hispanic	13.87	7.54	
Asian/Pacific Islander	9.55	2.90	
Native American	0.07	0.40	18.30 **
Minority-owned	27.52	12.49	
Nonminority female	16.00	6.74	
M/WBE total	43.51	19.22	
NONPROFESSIONAL SERVICES			
African American	2.30	4.33	53.06 ***
Hispanic	9.14	9.40	97.23
Asian/Pacific Islander	3.90	2.50	
Native American	0.00	0.25	0.00 ****
Minority-owned	15.34	16.49	93.02
Nonminority female	5.09	15.48	32.88 ****
M/WBE total	20.43	31.96	63.90 ****
COMMODITIES			
African American	0.00	1.89	0.00 ****
Hispanic	9.85	8.16	
Asian/Pacific Islander	0.00	3.16	0.00 ****
Native American	0.00	0.47	0.00 ****
Minority-owned	9.85	13.68	71.97 **
Nonminority female	0.00	9.20	0.00 ****
M/WBE total	9.85	22.88	43.03 ****

Source and Notes: See Table 6.8.

When the analysis is restricted to those contracts on which *no* M/WBE goals were established, the results are much different. For all procurement categories combined, Tables 6.12 and 6.13 show that disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were large and statistically significant for African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. In Construction, disparities were observed for African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were large and statistically significant for firms owned by African Americans, Native Americans, nonminority females and M/WBEs as a group. In Professional Services, large and statistically significant disparities were observed for firms owned by Native Americans. In Nonprofessional Services, large disparities were observed for firms owned by African Americans, Hispanics, Native Americans, minorities as a group, nonminority females, and M/WBEs as a group. These disparities were statistically significant for African Americans, Hispanics, minorities as a group, nonminority females, and M/WBEs as a group. In Commodities, large disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were statistically significant for Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group.

Table 6.12. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—Contracts without M/WBE Goals (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.69	2.74	61.81 *
Hispanic	5.84	8.87	65.86 ***
Asian/Pacific Islander	2.10	2.33	90.29
Native American	0.12	0.39	29.53 **
Minority-owned	9.75	14.32	68.06 ****
Nonminority female	4.98	10.87	45.83 ****
M/WBE total	14.73	25.20	58.47 ****
CONSTRUCTION			
African American	1.21	2.27	53.08 **
Hispanic	10.01	10.94	91.48
Asian/Pacific Islander	1.54	1.14	
Native American	0.02	0.56	4.19 ****
Minority-owned	12.78	14.92	85.66
Nonminority female	4.18	9.61	43.51 ****
M/WBE total	16.96	24.53	69.15 ****
PROFESSIONAL SERVICES			
African American	3.08	1.60	
Hispanic	11.20	7.18	
Asian/Pacific Islander	4.47	2.81	
Native American	0.00	0.38	0.00 ****
Minority-owned	18.74	11.97	
Nonminority female	9.13	6.93	
M/WBE total	27.87	18.90	
NONPROFESSIONAL SERVICES			
African American	1.82	3.91	46.42 ****
Hispanic	2.94	8.95	32.86 ****
Asian/Pacific Islander	2.80	2.40	
Native American	0.11	0.30	36.94
Minority-owned	7.67	15.56	49.29 ****
Nonminority female	5.51	14.39	38.29 ****
M/WBE total	13.18	29.95	44.00 ****
COMMODITIES			
African American	1.12	1.74	64.49
Hispanic	6.06	8.28	73.15 *
Asian/Pacific Islander	0.31	3.13	9.93 ****
Native American	0.21	0.42	49.91
Minority-owned	7.70	13.57	56.72 ****
Nonminority female	2.79	9.03	30.89 ****
M/WBE total	10.49	22.60	46.40 ****

Source and Notes: See Table 6.8.

Table 6.13. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category—Contracts without M/WBE Goals (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	1.79	2.91	61.26 *
Hispanic	6.30	9.10	69.29 ***
Asian/Pacific Islander	2.07	2.37	87.18
Native American	0.11	0.39	28.69 **
Minority-owned	10.27	14.78	69.51 ****
Nonminority female	5.13	11.20	45.78 ****
M/WBE total	15.40	25.98	59.27 ****
CONSTRUCTION			
African American	1.15	2.30	50.06 ***
Hispanic	12.77	10.80	
Asian/Pacific Islander	1.40	1.11	
Native American	0.03	0.59	4.81 ****
Minority-owned	15.35	14.80	
Nonminority female	4.38	9.56	45.84 ****
M/WBE total	19.73	24.35	81.02 ***
PROFESSIONAL SERVICES			
African American	3.59	1.64	
Hispanic	12.21	7.54	
Asian/Pacific Islander	4.32	2.90	
Native American	0.00	0.40	0.00 ****
Minority-owned	20.12	12.49	
Nonminority female	9.82	6.74	
M/WBE total	29.94	19.22	
NONPROFESSIONAL SERVICES			
African American	1.88	4.33	43.52 ****
Hispanic	3.16	9.40	33.58 ****
Asian/Pacific Islander	2.98	2.50	
Native American	0.13	0.25	52.84
Minority-owned	8.16	16.49	49.47 ****
Nonminority female	5.47	15.48	35.37 ****
M/WBE total	13.63	31.96	42.65 ****
COMMODITIES			
African American	1.20	1.89	63.46
Hispanic	5.49	8.16	67.27 ***
Asian/Pacific Islander	0.26	3.16	8.35 ****
Native American	0.16	0.47	34.57 *
Minority-owned	7.11	13.68	52.01 ****
Nonminority female	3.13	9.20	34.05 ****
M/WBE total	10.25	22.88	44.79 ****

Source and Notes: See Table 6.8.

2. Detailed Industry Level Results

Utilization, availability and disparity results comparable to those presented above in Tables 6.8 through 6.13 have also been produced according to detailed Industry Groups. In the interest of space, these tables are presented in Appendix D.

D. M/WBE Utilization and Disparity for Prime Contracting Dollars

1. Utilization Across Prime Contracts

From Tables 6.14 and 6.15 we see that, as a group during the study period, M/WBEs were awarded 14.72 percent and paid 13.79 percent of all prime contract dollars in Construction; awarded 14.26 percent and paid 14.84 percent of all prime contract dollars in Professional Services; awarded 10.64 percent and paid 11.23 percent of all prime contract dollars in Nonprofessional Services; and awarded 10.48 percent and paid 10.24 percent of all prime contract dollars in Commodities. Altogether, M/WBEs were awarded 12.25 percent and paid 12.20 percent of all prime contract dollars during the study period. Among M/WBEs, firms owned by Hispanics were awarded the largest fraction of prime contracting dollars (both awarded and paid), followed in descending order by firms owned by nonminority females, Asians/Pacific Islanders, African Americans, and Native Americans.

Non-M/WBEs were awarded and paid the vast majority of prime contract dollars—approximately 86 percent of all Construction dollars, 86 percent of all Professional Services dollars, 89 percent of all Nonprofessional Services dollars, 90 percent of all Commodities dollars, and 88 percent of dollars overall.

Table 6.14. M/WBE Utilization at the City of Austin—Prime Contracts (Dollars Awarded)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	0.12	0.74	0.94	1.11	0.72
Hispanic	9.74	4.80	2.29	6.09	5.64
Asian/Pacific Islander	1.07	3.15	2.66	0.31	1.72
Native American	0.00	0.02	0.11	0.21	0.09
Minority Total	10.93	8.71	6.00	7.72	8.17
Nonminority female	3.79	5.55	4.63	2.76	4.08
M/WBE Total	14.72	14.26	10.64	10.48	12.25
Non-M/WBE Total	85.28	85.74	89.36	89.52	87.75
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,418,347,835	643,671,866	1,729,836,803	1,151,098,221	4,942,954,725
Total Prime Contracts	475	479	1,440	1,540	3,934

Source: NERA Master Contract/Subcontract Database, 2008-2013.

Note: Figures are rounded. Rounding was performed subsequent to any mathematical calculations.

Table 6.15. M/WBE Utilization at the City of Austin—Prime Contracts (Dollars Paid)

M/WBE Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
African American	0.11	0.78	0.91	1.19	0.73
Hispanic	9.42	5.48	2.54	5.54	5.66
Asian/Pacific Islander	0.89	3.03	2.81	0.26	1.65
Native American	0.00	0.02	0.13	0.16	0.08
Minority Total	10.43	9.31	6.39	7.15	8.13
Nonminority female	3.37	5.53	4.83	3.10	4.07
M/WBE Total	13.79	14.84	11.23	10.24	12.20
Non-M/WBE Total	86.21	85.16	88.77	89.76	87.80
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	1,230,402,467	538,903,507	1,412,133,147	1,038,323,711	4,219,762,832
Total Prime Contracts	441	405	1,306	1,381	3,533

Source and Notes: See Table 6.1.

2. Results for Prime Contracting by Major Procurement Category

Below, we compare our estimates of M/WBE utilization in City of Austin prime contracting to our estimates of M/WBE availability in the relevant geographic and product market area. Tables 6.16 and 6.17 present the results of this comparison for all prime contracts and purchase orders examined during the study period, using dollars awarded and dollars paid, respectively, as the metric of utilization.

When all procurement categories were combined, Tables 6.16 and 6.17 show that disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females, and M/WBEs as a group. These disparities were large and statistically significant for African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group.

In Construction, disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were large for African Americans, Native Americans, Asians/Pacific Islanders, minorities as a group, nonminority females and M/WBEs as a group, and they were statistically significant for African Americans, Native Americans, minorities as a group, nonminority females and M/WBEs as a group.

In Professional Services, large disparities were observed for firms owned by African Americans, Hispanics, Native Americans, minorities as a group, nonminority females, and M/WBEs as a group. These disparities were statistically significant for African Americans, Hispanics, Native Americans, minorities as a group and M/WBEs as a group.

In Nonprofessional Services, large disparities were observed for firms owned by African Americans, Hispanics, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were statistically significant for African Americans, Hispanics, minorities as a group, nonminority females and M/WBEs as a group.

In Commodities, large disparities were observed for firms owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans, minorities as a group, nonminority females and M/WBEs as a group. These disparities were statistically significant for Hispanics, Asians/Pacific Islanders, minorities as a group, nonminority females and M/WBEs as a group.

Table 6.16. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–Prime Contracts (Dollars Awarded)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	0.72	2.74	26.20 ****
Hispanic	5.64	8.87	63.59 ****
Asian/Pacific Islander	1.72	2.33	74.03
Native American	0.09	0.39	22.92 ***
Minority-owned	8.17	14.32	57.03 ****
Nonminority female	4.08	10.87	37.49 ****
M/WBE total	12.25	25.20	48.60 ****
CONSTRUCTION			
African American	0.12	2.27	5.42 ****
Hispanic	9.74	10.94	88.96
Asian/Pacific Islander	1.07	1.14	93.62
Native American	0.00	0.56	0.00 ****
Minority-owned	10.93	14.92	73.25 ***
Nonminority female	3.79	9.61	39.49 ****
M/WBE total	14.72	24.53	60.03 ****
PROFESSIONAL SERVICES			
African American	0.74	1.60	46.13 ***
Hispanic	4.80	7.18	66.89 ***
Asian/Pacific Islander	3.15	2.81	
Native American	0.02	0.38	4.45 ****
Minority-owned	8.71	11.97	72.73 ***
Nonminority female	5.55	6.93	80.17
M/WBE total	14.26	18.90	75.46 ***
NONPROFESSIONAL SERVICES			
African American	0.94	3.91	23.93 ****
Hispanic	2.29	8.95	25.61 ****
Asian/Pacific Islander	2.66	2.40	
Native American	0.11	0.30	37.57
Minority-owned	6.00	15.56	38.60 ****
Nonminority female	4.63	14.39	32.20 ****
M/WBE total	10.64	29.95	35.52 ****
COMMODITIES			
African American	1.11	1.74	63.83
Hispanic	6.09	8.28	73.62 *
Asian/Pacific Islander	0.31	3.13	9.83 ****
Native American	0.21	0.42	49.39
Minority-owned	7.72	13.57	56.88 ****
Nonminority female	2.76	9.03	30.57 ****
M/WBE total	10.48	22.60	46.37 ****

Source and Notes: See Table 6.8.

Table 6.17. Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–Prime Contracts (Dollars Paid)

Contracting Category & M/WBE Type	Utilization	Availability	Disparity Ratio
OVERALL			
African American	0.73	2.91	25.10 ****
Hispanic	5.66	9.10	62.22 ****
Asian/Pacific Islander	1.65	2.37	69.61
Native American	0.08	0.39	21.46 ***
Minority-owned	8.13	14.78	55.01 ****
Nonminority female	4.07	11.20	36.31 ****
M/WBE total	12.20	25.98	46.95 ****
CONSTRUCTION			
African American	0.11	2.30	4.91 ****
Hispanic	9.42	10.80	87.26
Asian/Pacific Islander	0.89	1.11	80.24
Native American	0.00	0.59	0.00 ****
Minority-owned	10.43	14.80	70.47 ****
Nonminority female	3.37	9.56	35.23 ****
M/WBE total	13.79	24.35	56.64 ****
PROFESSIONAL SERVICES			
African American	0.78	1.64	47.69 **
Hispanic	5.48	7.54	72.73 **
Asian/Pacific Islander	3.03	2.90	
Native American	0.02	0.40	5.08 ****
Minority-owned	9.31	12.49	74.58 ***
Nonminority female	5.53	6.74	82.07
M/WBE total	14.84	19.22	77.20 ***
NONPROFESSIONAL SERVICES			
African American	0.91	4.33	21.15 ****
Hispanic	2.54	9.40	27.02 ****
Asian/Pacific Islander	2.81	2.50	
Native American	0.13	0.25	49.51
Minority-owned	6.39	16.49	38.79 ****
Nonminority female	4.83	15.48	31.24 ****
M/WBE total	11.23	31.96	35.13 ****
COMMODITIES			
African American	1.19	1.89	62.74
Hispanic	5.54	8.16	67.88 ***
Asian/Pacific Islander	0.26	3.16	8.26 ****
Native American	0.16	0.47	34.18
Minority-owned	7.15	13.68	52.24 ****
Nonminority female	3.10	9.20	33.66 ****
M/WBE total	10.24	22.88	44.77 ****

Source and Notes: See Table 6.8.

E. VOB and SDVOB Utilization

From Tables 6.18 and 6.19 we see that, during the study period, VOBs were awarded 0.94 percent and paid 0.65 percent of all contract and subcontract dollars in Construction; awarded 0.32 percent and paid 0.32 percent of all contract and subcontract dollars in Professional Services; awarded 1.24 percent and paid 1.35 percent of all contract and subcontract dollars in Nonprofessional Services; and awarded 2.18 percent and paid 2.31 percent of all contract and subcontract dollars in Commodities. Altogether, VOBs were awarded 1.30 percent and paid 1.30 percent of all contract and subcontract dollars during the study period.¹⁶⁵

SDVOBs were awarded 0.03 percent and paid 0.01 percent of all contract and subcontract dollars in Construction; awarded 0.00 percent and paid 0.00 percent of all contract and subcontract dollars in Professional Services; awarded 0.22 percent and paid 0.31 percent of all contract and subcontract dollars in Nonprofessional Services; and awarded 0.31 percent and paid 0.35 percent of all contract and subcontract dollars in Commodities. Altogether, SDVOBs were awarded 0.17 percent and paid 0.20 percent of all contract and subcontract dollars during the study period.

Table 6.18. VOB and SDVOB Utilization at the City of Austin—All Contracts (Dollars Awarded)

Veteran Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
VOB	0.94	0.32	1.24	2.18	1.30
SDVOB	0.03	0.00	0.22	0.31	0.17
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	523,285,190	292,819,270	656,319,346	579,340,061	2,051,763,867
Total Prime Contracts	214	269	719	691	1,893
Total Subcontracts	2,950	1,777	996	0	5,723

Source and Notes: See Table 6.1.

¹⁶⁵ VOB and SDVOB utilization was estimated using a subset of the full Master Contract/Subcontract Database for this study. We restricted our estimates to those contracts or subcontracts where we were able to verify, primarily through our telephone surveys, that an establishment was or was not owned by a veteran or a service-disabled veteran. The subset we selected for analysis consisted of approximately 41.5 percent of all dollars awarded and 40.0 percent of all dollars paid during the study period.

Table 6.19. VOB and SDVOB Utilization at the City of Austin—All Contracts (Dollars Paid)

Veteran Type	Procurement Category				
	Construction (%)	Professional Services (%)	Nonprofessional Services (%)	Commodities (%)	Overall (%)
VOB	0.65	0.32	1.35	2.31	1.30
SDVOB	0.01	0.00	0.31	0.35	0.20
Total (%)	100.00	100.00	100.00	100.00	100.00
Total (\$)	455,450,962	255,684,205	464,921,518	508,602,199	1,684,658,885
Total Prime Contracts	199	231	639	615	1,684
Total Subcontracts	2,736	1,518	854	0	5,108

Source and Notes: See Table 6.1.

F. VOB and SDVOB Disparity

Tables 6.20 and 6.21 compare our estimates of VOB and SDVOB utilization in City of Austin contracting and subcontracting activities to our estimates of VOB and SDVOB availability in the relevant geographic and product market area. Table 6.20 uses dollars awarded as the measure of utilization, while Table 6.21 uses dollars paid.

When all procurement categories were combined, Tables 6.20 and 6.21 show that large, adverse and statistically significant disparities were observed for both VOBs and SDVOBs in all four major procurement categories and overall.

Table 6.20. VOB and SDVOB Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–All Contracts (Dollars Awarded)

Contracting Category & Veteran Type	Utilization	Availability	Disparity Ratio
OVERALL			
Veteran	1.30	7.36	17.7 ****
Service-Disabled Veteran	0.17	1.77	9.4 ****
CONSTRUCTION			
Veteran	0.94	5.80	16.2 ****
Service-Disabled Veteran	0.03	1.10	3.1 ****
PROFESSIONAL SERVICES			
Veteran	0.32	9.46	3.4 ****
Service-Disabled Veteran	0.00	1.85	0.0 ****
NONPROFESSIONAL SERVICES			
Veteran	1.24	7.23	17.2 ****
Service-Disabled Veteran	0.22	1.83	12.2 ****
COMMODITIES			
Veteran	2.18	6.29	34.7 ****
Service-Disabled Veteran	0.31	2.30	13.6 ****

Source and Notes: See Table 6.8.

Table 6.21. VOB and SDVOB Utilization, Availability, and Disparity Results for City of Austin Contracting, Overall and by Contracting Category–All Contracts (Dollars Paid)

Contracting Category & Veteran Type	Utilization	Availability	Disparity Ratio
OVERALL			
Veteran	1.30	6.96	18.6 ****
Service-Disabled Veteran	0.20	1.53	12.8 ****
CONSTRUCTION			
Veteran	0.65	5.74	11.3 ****
Service-Disabled Veteran	0.01	1.07	0.9 ****
PROFESSIONAL SERVICES			
Veteran	0.32	9.35	3.5 ****
Service-Disabled Veteran	0.00	1.74	0.0 ****
NONPROFESSIONAL SERVICES			
Veteran	1.35	6.39	21.1 ****
Service-Disabled Veteran	0.31	1.24	25.2 ****
COMMODITIES			
Veteran	2.31	6.45	35.8 ****
Service-Disabled Veteran	0.35	2.46	14.4 ****

Source and Notes: See Table 6.8.

G. Current Availability versus Expected Availability

Finally, Table 6.22 provides a comparison between current levels of M/WBE availability for the City of Austin and levels that we would expect to observe in a race- and gender-neutral market area. The latter, referred to as “expected availability,” is derived by dividing the current availability figures, as documented in Table 3.11, by the disparity ratios documented in column (3) of Table 4.12. If no disparity is present in the relevant market area, the disparity ratio will be equal to 100 and expected availability will be equivalent to current availability. In cases where adverse disparities are present in the relevant market area, the disparity ratio will be less than 100 and, consequently, expected availability will exceed current availability.

In each of 70 instances, expected M/WBE availability in the City of Austin’s market area exceeds current M/WBE availability by substantial margins.

Table 6.22. Current Availability and Expected Availability for City of Austin Contracting

Contracting Category & M/WBE Type	Award Dollar Weights		Paid Dollar Weights	
	Current Availability (%)	Expected Availability (%)	Current Availability (%)	Expected Availability (%)
OVERALL				
African American	2.74	4.46	2.91	4.73
Hispanic	8.87	12.09	9.10	12.40
Asian/Pacific Islander	2.33	3.08	2.37	3.14
Native American	0.39	0.47	0.39	0.47
Minority	14.32	19.84	14.78	20.48
Nonminority female	10.87	13.58	11.20	13.99
M/WBE total	25.20	34.41	25.98	35.48
CONSTRUCTION				
African American	2.27	3.32	2.30	3.37
Hispanic	10.94	18.38	10.80	18.15
Asian/Pacific Islander	1.14	1.47	1.11	1.43
Native American	0.56	0.85	0.59	0.90
Minority	14.92	25.07	14.80	24.87
Nonminority female	9.61	16.17	9.56	16.08
M/WBE total	24.53	42.71	24.35	42.40
PROFESSIONAL SERVICES				
African American	1.60	2.34	1.64	2.40
Hispanic	7.18	12.07	7.54	12.67
Asian/Pacific Islander	2.81	3.61	2.90	3.73
Native American	0.38	0.58	0.40	0.61
Minority	11.97	20.11	12.49	20.98
Nonminority female	6.93	11.66	6.74	11.34
M/WBE total	18.90	32.91	19.22	33.47
NONPROFESSIONAL SERVICES				
African American	3.91	8.01	4.33	8.87
Hispanic	8.95	13.01	9.40	13.66
Asian/Pacific Islander	2.40	3.37	2.50	3.51
Native American	0.30	0.43	0.25	0.36
Minority	15.56	21.66	16.49	22.95
Nonminority female	14.39	19.80	15.48	21.30
M/WBE total	29.95	40.00	31.96	42.68
COMMODITIES				
African American	1.74	3.56	1.89	3.87
Hispanic	8.28	12.03	8.16	11.86
Asian/Pacific Islander	3.13	4.40	3.16	4.44
Native American	0.42	0.61	0.47	0.68
Minority	13.57	18.89	13.68	19.04
Nonminority female	9.03	12.43	9.20	12.66
M/WBE total	22.60	30.18	22.88	30.56

Source: See Tables 3.11 and 4.12.

VII. Anecdotal Evidence of Disparities in the City of Austin Market Area

A. Introduction

We have presented a variety of economic and statistical findings above that are consistent with, and indicative of, the presence of business discrimination against minorities and women in the geographic and product markets that are relevant to the City of Austin's Construction, Professional Services, Nonprofessional Services and Commodities contracting activities. Chapters IV and V, in particular, have documented large and statistically significant disparities in the City of Austin's relevant markets adversely impacting the competitiveness and utilization of minority and female entrepreneurs. In most cases, commercial loan denial rates were higher, the cost of credit was higher, business formation rates are lower, and business owner earnings are lower—even when comparisons are restricted to similarly situated businesses and business owners.

As a complement to these quantitative findings, we gathered anecdotal evidence regarding disparities, perceived barriers, and differences in treatment of business owners on the basis of race and/or gender in the City of Austin's market area. First, we conducted a large scale survey of business establishments in the market area—both M/WBE and non-M/WBE—and asked owners directly about their experiences, if any, with contemporary business-related acts of discrimination. We find that M/WBEs in the City of Austin's markets report suffering business-related discrimination in substantial numbers and often with statistically significantly greater frequency than non-M/WBEs (see Tables 7.3 and 7.4). These differences tend to remain statistically significant when firm size and owner characteristics are held constant (see Tables 7.5 and 7.6). Additionally, we find that M/WBE firms that have been hired in the past by non-M/WBE prime contractors to work on public sector contracts with M/WBE goals often are not hired—or even solicited—by these prime contractors to work on projects without M/WBE goals (see Tables 7.9 and 7.10). The relative lack of M/WBE hiring and, even more significantly, the relative lack of solicitation of M/WBEs in the absence of affirmative efforts by the City of Austin and other public entities in the relevant market area, shows that business discrimination continues to fetter M/WBE business opportunities. We conclude that the statistical evidence presented in this Study is consistent with these anecdotal accounts of contemporary business discrimination.

The remainder of this chapter is organized as follows. We first discuss the mail survey results in Section B. In Section B.1, we discuss the survey questionnaire, sample frame, and response rate. Section B.2 presents evidence on willingness of firms to do business with the public sector. Section B.3 presents the key findings from the M/WBE and non-M/WBE respondents concerning disparate treatment. Section B.4 presents the key findings concerning the impact of the current business environment on M/WBEs' ability to conduct their businesses. Section B.5 presents key findings to our questions concerning whether prime contractors solicit or hire M/WBEs for work on public or private contracts without M/WBE goals. Section B.6 then examines whether M/WBEs and non-M/WBEs that responded to the mail surveys are representative of all M/WBEs and non-M/WBEs in the relevant markets. To do so, we surveyed

a random sample of M/WBEs and non-M/WBEs that did not respond to our mail survey, and then compared their responses to key questions with those of our survey respondents.

Finally, Section C describes the results of the business experience group interviews. Responses are grouped under the headings of the most common cited barriers and issues facing businesses in the City of Austin's contracting market area.

B. Business Experience Surveys

1. Survey Questionnaire, Sample, and Responses

The survey questionnaire asked whether and with what frequency firms had experienced discrimination in a wide variety of likely business dealings in the previous five years. The survey also inquired about the influence of specific aspects of the everyday business environment, such as bonding and insurance requirements, on each firm's ability to do business in the City of Austin's relevant markets. We also asked about the relative frequency with which firms that have been used as subcontractors, subconsultants, or suppliers by prime contractors on contracts *with* M/WBE goals have been hired to work, or even solicited to bid, on similar contracts *without* M/WBE goals. Finally, we posed questions about the characteristics of the firm, including firm age, owner's education, employment size and revenue size, to facilitate comparisons of similarly situated firms.

The mail survey sample was stratified by industry and drawn directly from the Master M/WBE Directory and the Baseline Business Universe compiled for this Study using the custom census methodology outlined in this chapter.¹⁶⁶ Firms were sampled randomly within strata. M/WBE firms were oversampled to facilitate statistical comparisons with non-M/WBEs.¹⁶⁷ Of 10,836 businesses that received the questionnaire,¹⁶⁸ 916 (8.5%) provided usable responses.¹⁶⁹ The distribution of total responses according to the race and gender of the business owner, by major contracting category, appears in Table 7.1.

¹⁶⁶ See Chapter II for a discussion of how the product and geographic markets were defined. See Chapter III for a discussion of how the Master M/WBE Directory and the Baseline Business Universe were assembled.

¹⁶⁷ Although establishments identified as VOBs or SDVOBs in the Master M/WBE Directory that merged with Dun & Bradstreet were included in the survey mailing, it was generally not possible to similarly oversample VOBs or SDVOBs, as such firms are not distinguished in the Dun & Bradstreet database.

¹⁶⁸ These figures exclude surveys that were returned undelivered or were otherwise undeliverable.

¹⁶⁹ The total number of valid responses to any particular survey question, however, was sometimes lower than this due to item non-response.

Table 7.1. Race, Gender and Contracting Category of Mail Survey Respondents

Group	Construction	Professional Services	Nonprofessional Services	Commodities	Total
African American	8	9	40	10	67
Hispanic	44	24	80	20	168
Asian/Pacific Islander	3	11	40	5	59
Native American	6	0	10	6	22
Minorities with unknown Race/Ethnicity	0	0	0	0	0
Nonminority Women	34	60	241	80	415
M/WBE Total	95	104	411	121	731
Nonminority Men	67	27	69	22	185
Veteran	11	8	33	12	64
Service-Disabled Veteran	5	1	18	2	26
Total	162	131	480	143	916

Source: NERA mail survey.

Note: Individual categories will not sum to total since Veterans and Service-Disabled Veterans were also classified by race and sex.

2. Willingness of Firms to Contract with the Public Sector

The probative value of anecdotal evidence of discrimination increases when it comes from active businesses in the relevant geographic and procurement markets. The value of such evidence increases further when it comes from firms that have actually worked or attempted to work for the public sector within those markets. Such is the present case.

As shown below in Table 7.2, there is an observable link between the firms responding to our mail survey and the public sector of the Austin area economy. All respondents operate establishments in the relevant geographic and product markets. Moreover, significant numbers of survey respondents have worked or attempted to do work for the City of Austin, Travis County, the Austin Independent School District or other public entities in the market area in the last five years. This is observed for virtually all types of M/WBEs and non-M/WBEs in all procurement categories. Overall, 45 percent of non-M/WBEs and 56 percent of M/WBEs have worked or

attempted to work for the City of Austin, Travis County, the Austin Independent School District or some other public entity in the market area in the previous five years. For M/WBEs in Construction and Professional Services, the figures are significantly higher than this, at 68 percent and 60 percent, respectively. For non-M/WBEs, these figures are also significantly higher for Construction (54%) and Professional Services (48%).

Table 7.2A shows comparable results for VOBs and SDVOBs. Overall, 41 percent of VOBs and 40 percent of SDVOBs have worked or attempted to work for the City of Austin, Travis County, or the Austin Independent School District in the previous five years. When the question is expanded to include any public entity in the Austin market area, these figures rise substantially, to 82 percent and 92 percent, respectively. As with M/WBEs and non-M/WBEs, the figures are higher in Construction and Professional Services and lower in Commodities. Unlike M/WBEs and non-M/WBEs, they are also substantial in the Nonprofessional Services category.

Table 7.2. Survey Respondents Indicating They Had Worked or Attempted to Work for Public Sector Agencies in the Last Five Years

Worked or Attempted to Work, Last 5 Years	African American	Hispanic	Asian/Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total	Non-minority Male
ALL INDUSTRIES								
With City of Austin, Travis County or AISD	55.2%	51.5%	41.4%	45.5%	50.0%	37.2%	42.7%	33.2%
	(67)	(167)	(58)	(22)	(314)	(409)	(723)	(184)
With Other Public Entity in Market Area	58.5%	56.6%	42.4%	54.5%	54.2%	45.0%	49.0%	39.9%
	(65)	(166)	(59)	(22)	(312)	(404)	(716)	(183)
With any Public Entity in Market Area	68.2%	64.5%	53.4%	63.6%	63.1%	50.4%	55.9%	44.8%
	(66)	(166)	(58)	(22)	(312)	(407)	(719)	(183)
CONSTRUCTION								
With City of Austin, Travis County or AISD	37.5%	56.8%	66.7%	50.0%	54.1%	66.7%	58.5%	40.3%
	(8)	(44)	(3)	(6)	(61)	(33)	(94)	(67)
With Other Public Entity in Market Area	50.0%	58.1%	66.7%	50.0%	56.7%	75.8%	63.4%	49.3%
	(8)	(43)	(3)	(6)	(60)	(33)	(93)	(67)
With any Public Entity in Market Area	50.0%	65.1%	66.7%	50.0%	61.7%	79.4%	68.1%	53.7%
	(8)	(43)	(3)	(6)	(60)	(34)	(94)	(67)
PROFESSIONAL SERVICES								
With City of Austin, Travis County or AISD	33.3%	50.0%	63.6%	-	50.0%	45.0%	47.1%	40.7%
	(9)	(24)	(11)	(0)	(44)	(60)	(104)	(27)
With Other Public Entity in Market Area	50.0%	62.5%	72.7%	-	62.8%	52.6%	57.0%	44.4%
	(8)	(24)	(11)	(0)	(43)	(57)	(100)	(27)
With any Public Entity in Market Area	50.0%	66.7%	72.7%	-	65.1%	56.9%	60.4%	48.1%
	(8)	(24)	(11)	(0)	(43)	(58)	(101)	(27)

Anecdotal Evidence of Disparities in the City of Austin Market Area

Worked or Attempted to Work, Last 5 Years	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total	Non-minority Male
NONPROFESSIONAL SERVICES								
With City of Austin, Travis County or AISD	67.5%	50.0%	35.9%	50.0%	50.9%	26.1%	36.4%	26.5%
	(40)	(80)	(39)	(10)	(169)	(238)	(407)	(68)
With Other Public Entity in Market Area	64.1%	55.0%	35.0%	40.0%	51.5%	34.5%	41.6%	31.3%
	(39)	(80)	(40)	(10)	(169)	(235)	(404)	(67)
With any Public Entity in Market Area	77.5%	66.3%	51.3%	60.0%	65.1%	41.5%	51.4%	35.8%
	(40)	(80)	(39)	(10)	(169)	(236)	(405)	(67)
COMMODITIES								
With City of Austin, Travis County or AISD	40.0%	47.4%	20.0%	33.3%	40.0%	52.6%	48.3%	22.7%
	(10)	(19)	(5)	(6)	(40)	(78)	(118)	(22)
With Other Public Entity in Market Area	50.0%	52.6%	20.0%	83.3%	52.5%	58.2%	56.3%	31.8%
	(10)	(19)	(5)	(6)	(40)	(79)	(119)	(22)
With any Public Entity in Market Area	60.0%	52.6%	20.0%	83.3%	55.0%	59.5%	58.0%	40.9%
	(10)	(19)	(5)	(6)	(40)	(79)	(119)	(22)

Source: NERA mail survey. Note: Total number of valid responses in parentheses.

Table 7.2A. Veteran Survey Respondents Indicating They Had Worked or Attempted to Work for Public Sector Agencies in the Last Five Years

Worked or Attempted to Work, Last 5 Years	Veteran	Service-Disabled Veteran
ALL INDUSTRIES		
With City of Austin, Travis County or AISD	41.3%	40.0%
	(26)	(10)
With Other Public Entity in Market Area	52.5%	56.0%
	(32)	(14)
With any Public Entity in Market Area	82.0%	92.0%
	(50)	(23)
CONSTRUCTION		
With City of Austin, Travis County or AISD	36.4%	20.0%
	(4)	(1)
With Other Public Entity in Market Area	54.6%	60.0%
	(6)	(3)
With any Public Entity in Market Area	90.9%	80.0%
	(10)	(4)
PROFESSIONAL SERVICES		
With City of Austin, Travis County or AISD	50.0%	0.0%
	(4)	(0)
With Other Public Entity in Market Area	57.1%	0.0%
	(4)	(0)
With any Public Entity in Market Area	87.5%	100.0%
	(7)	(1)
NONPROFESSIONAL SERVICES		
With City of Austin, Travis County or AISD	50.0%	52.9%
	(16)	(9)
With Other Public Entity in Market Area	54.8%	58.8%
	(17)	(10)
With any Public Entity in Market Area	87.1%	94.1%
	(27)	(16)
COMMODITIES		
With City of Austin, Travis County or AISD	16.7%	0.0%
	(2)	(0)
With Other Public Entity in Market Area	41.7%	50.0%
	(5)	(1)
With any Public Entity in Market Area	54.6%	100.0%
	(6)	(2)

Source and Note: See Table 7.2.

3. Experiences of Disparate Treatment in Business Dealings

The survey included questions about instances of disparate treatment based on race and/or gender experienced in various business dealings during the past five years. As shown in the last row of Table 7.3, almost 40 percent of M/WBE firms said they had experienced at least one instance of disparate treatment in one or more areas of business dealings identified on the survey. Reports of disparate treatment were substantially and statistically significantly higher for minorities than for nonminorities, casting doubt on claims of widespread “reverse discrimination.” On average, reports were highest among African Americans, with an overall rate of 59 percent, followed in descending order, by Native Americans (52%), Hispanics (49%), and Asians/Pacific Islanders (40%). For nonminority women, the disparate treatment incidence rate was 31 percent. By comparison, the reported rate for nonminority males was just 24 percent.

The balance of Table 7.3 shows results for each of 14 distinct types of disparate treatment that we asked about in the survey.

In 14 of 14 categories the ratio of the reported amount of disparate treatment between MBEs and non-M/WBEs is large—more than 150% of the reported rate for non-M/WBEs. In 9 of 14 categories this difference is statistically significant as well. In several categories the reported incidence of disparate treatment is even more frequent than 150% of the non-M/WBE incidence. In applying for commercial loans, for example, MBEs reported disparate treatment more than eight times more frequently than nonminority males.¹⁷⁰ In working or attempting to work on private sector subcontracts, it was over six times more frequent. In receiving timely payment for work performed and working or attempting to work on private sector prime contracts, it was over three times more frequent. In functioning without hindrance or harassment on the work site, having to do inappropriate or extra work not required of comparable non-M/WBEs, applying for surety bonds, having to meet performance standards not required of comparable non-M/WBEs, hiring workers from union hiring halls, and applying for commercial or professional insurance, it was over two times as frequent.

In 8 of 14 categories the ratio of the reported amount of disparate treatment experienced by nonminority females exceeded that reported by non-M/WBEs, and in 5 of the 14 categories this difference is statistically significant as well. In applying for commercial loans, nonminority females reported disparate treatment almost four times more frequently than nonminority males.¹⁷¹ In working or attempting to work on private sector subcontracts, it was 2.5 times more frequent. In receiving timely payment for work performed, functioning without hindrance or harassment on the work site, obtaining price quotes from suppliers or subcontractors, hiring workers from union hiring halls, working or attempting to work on private sector prime contracts, and joining or dealing with trade associations, it was between 1.1 and 2.2 times more frequent.

¹⁷⁰ For more evidence on this topic, *see* Chapter V.

¹⁷¹ For more evidence on this topic, *see* Chapter V.

Table 7.3 also provides evidence of the positive impact of public sector M/WBE programs such as the City of Austin's. The two categories with the smallest relative differences between M/WBEs and non-M/WBEs were working or attempting to work on public sector prime contracts and working or attempting to work on public sector subcontracts. In these two categories the incidence of disparate impact was 1.00 and 1.08 times more frequent, respectively.

The survey also asked these questions of VOBs and SDVOBs, and the results are reported in Table 7.3A. Among VOBs, 50 percent said they had experienced at least one instance of disparate treatment in one or more areas of business dealings identified on the survey. Among SDVOBs, the figure was 45.5 percent. Reports of disparate treatment were substantially higher for VOBs and SDVOBs than for non-VOBs, consistent with claims of social and economic disadvantage for this group.

The balance of Table 7.3A shows results for each of 14 distinct types of disparate treatment that we asked about in the survey. In the areas of applying for commercial or professional insurance, working or attempting to work on public sector prime contracts, working or attempting to work on public sector subcontracts, working or attempting to work on private sector prime contracts, receiving timely payment for work performed, joining or dealing with trade associations, having to do inappropriate or extra work, and encountering double standards, VOBs reported a significantly greater incidence of disparate treatment than non-VOBs. In the areas of applying for commercial loans, applying for commercial or professional insurance, obtaining price quotes from suppliers or subcontractors, working or attempting to work on public sector prime contracts, and receiving timely payment for work performed, SDVOBs reported a significantly greater incidence of disparate treatment than non-VOBs.

Anecdotal Evidence of Disparities in the City of Austin Market Area

Table 7.3. Firms Indicating They Had Been Treated Less Favorably Due to Race and/or Gender While Participating in Business Dealings

Business Dealings	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total	Non-minority Male
Applying for commercial loans	37.5% (32)	17.7% (96)	26.9% (26)	38.5% (13)	24.6% (167)	11.4% (166)	18.0% (333)	2.9% (69)
Applying for surety bonds	13.0% (23)	7.1% (70)	7.1% (14)	0.0% (8)	7.8% (115)	3.3% (90)	5.9% (205)	3.4% (59)
Applying for commercial or professional insurance	20.5% (39)	10.4% (115)	5.4% (37)	6.3% (16)	11.1% (207)	2.0% (249)	6.1% (456)	5.4% (92)
Hiring workers from union hiring halls	5.3% (19)	4.3% (47)	0.0% (8)	14.3% (7)	4.9% (81)	3.0% (66)	4.1% (147)	2.3% (43)
Obtaining price quotes from suppliers or subcontractors	21.2% (33)	12.4% (97)	7.1% (28)	18.8% (16)	13.8% (174)	10.7% (205)	12.1% (379)	8.2% (85)
Working or attempting to obtain work on public sector prime contracts	50.0% (36)	25.5% (94)	33.3% (27)	12.5% (16)	30.6% (173)	9.2% (163)	20.2% (336)	20.3% (74)
Working or attempting to obtain work on public sector subcontracts	47.1% (34)	19.4% (98)	25.0% (28)	12.5% (16)	25.0% (176)	7.9% (164)	16.8% (340)	15.5% (71)
Working or attempting to obtain work on private sector prime contracts	37.8% (37)	21.4% (98)	22.2% (36)	17.6% (17)	24.5% (188)	9.6% (198)	16.8% (386)	8.1% (86)
Working or attempting to obtain work on private sector subcontracts	35.1% (37)	16.2% (99)	22.2% (36)	17.6% (17)	21.2% (189)	8.6% (186)	14.9% (375)	3.4% (87)
Receiving timely payment for work performed	47.6% (42)	30.6% (111)	28.9% (38)	35.3% (17)	34.1% (208)	20.8% (255)	26.8% (463)	9.5% (95)
Functioning without hindrance or harassment on the work site	14.3% (35)	12.7% (102)	22.9% (35)	31.3% (16)	16.5% (188)	12.7% (212)	14.5% (400)	6.5% (92)
Joining or dealing with construction trade associations	8.3% (24)	5.2% (77)	5.3% (19)	18.2% (11)	6.9% (131)	4.8% (125)	5.9% (256)	4.2% (71)
Having to do inappropriate or extra work not required of comparable non-M/WBEs	28.6% (35)	21.4% (103)	20.6% (34)	23.5% (17)	22.8% (189)	8.8% (204)	15.5% (393)	9.6% (83)
Double standards not required of comparable non-M/WBEs	21.1% (38)	18.8% (101)	15.2% (33)	25.0% (16)	19.1% (188)	6.7% (210)	12.6% (398)	9.0% (89)
In any one of the business dealings listed above	58.8% (51)	48.9% (139)	40.0% (50)	52.4% (21)	49.4% (261)	30.8% (318)	39.2% (579)	24.4% (119)

Source: See Table 7.2.

Notes: Total number of valid responses in parentheses. Figures in **boldface** type are statistically significantly different from non-M/WBEs using a conventional two-tailed Fisher's Exact Test and within a 95% or better confidence interval. Figures in **boldface italicized** type are significant within a 90% confidence interval.

Table 7.3A. Veteran and Service-Disabled Veteran Firms Indicating They Had Been Treated Less Favorably While Participating in Business Dealings

Business Dealings	Veteran	Service-Disabled Veteran	Non-Veteran
Applying for commercial loans	16.7%	28.6%	15.3%
	(5)	(4)	(57)
Applying for surety bonds	0.0%	0.0%	5.7%
	(20)	(10)	(14)
Applying for commercial or professional insurance	12.8%	17.7%	5.5%
	(5)	(3)	(28)
Hiring workers from union hiring halls	0.0%	0.0%	4.0%
	(14)	(6)	(7)
Obtaining price quotes from suppliers or subcontractors	15.2%	23.1%	11.1%
	(5)	(3)	(48)
Working or attempting to obtain work on public sector prime contracts	40.6%	<i>40.0%</i>	18.5%
	(13)	<i>(6)</i>	(70)
Working or attempting to obtain work on public sector subcontracts	25.8%	7.7%	15.8%
	(8)	(1)	(60)
Working or attempting to obtain work on private sector prime contracts	22.9%	13.3%	14.7%
	(8)	(2)	(64)
Working or attempting to obtain work on private sector subcontracts	15.6%	13.3%	12.6%
	(5)	(2)	(54)
Receiving timely payment for work performed	32.7%	31.6%	23.1%
	(14)	(6)	(119)
Functioning without hindrance or harassment on the work site	5.9%	0.0%	13.5%
	(2)	(0)	(62)
Joining or dealing with construction trade associations	9.1%	0.0%	5.3%
	(2)	(0)	(16)
Having to do inappropriate or extra work not required of comparable non-M/WBEs	21.2%	16.7%	14.0%
	(7)	(2)	(62)
Double standards not required of comparable non-M/WBEs	17.1%	14.3%	11.5%
	(6)	(2)	(52)
In any one of the business dealings listed above	50.0%	45.5%	35.7%
	(25)	(10)	(231)

Source: See Table 7.2.

Notes: Total number of valid responses in parentheses. Figures in **boldface** type are statistically significantly different from non-veterans using a conventional two-tailed Fisher's Exact Test and within a 95% or better confidence interval. Figures in **boldface italicized** type are significant within a 90% confidence interval.

Table 7.4 represents the same disparate treatment information as in Table 7.3, but with the frequency percentages replaced by relative rankings. That is, the 14 kinds of disparate treatment are ranked by each group according to the frequency with which disparate treatment was reported, with “1” representing the most frequent and “14” representing the least frequent.¹⁷² The most frequently reported problem overall for M/WBEs—as opposed to the one with the most relative difference from non-M/WBEs—was receiving timely payment for work performed. The next five most frequently reported, in descending order of frequency, were working or attempting to work on public sector prime contracts,¹⁷³ applying for commercial loans, working or attempting to work on private sector prime contracts, working or attempting to work on public sector subcontracts,¹⁷⁴ and having to do extra work not required of non-M/WBEs.

Table 7.4A shows comparable information for VOBs and SDVOBs. The most frequently reported problem overall for VOBs and SDVOBs—as opposed to the one with the most relative difference from non-VOBs—was working or attempting to work on public sector prime contracts. For VOBs, the next five most frequently reported, in descending order of frequency, were receiving timely payment for work performed, working or attempting to work on public sector subcontracts, working or attempting to work on public sector prime contracts, and having to do extra work not required of other firms. For SDVOBs, the next five most frequently reported, in descending order of frequency, were receiving timely payment for work performed, applying for commercial loans, obtaining price quotes from suppliers or subcontractors, applying for commercial or professional insurance, and having to do extra work not required of other firms.

Some courts and other observers have asserted that findings such as those in Tables 7.3 and 7.4 tell us nothing about discrimination against M/WBEs since, even though they are current and come directly from the businesses reporting disparate treatment, even though they are restricted to the relevant geographic and product markets, even though they are disaggregated by contracting category and by race and gender, they still do not compare firms of similar size, qualifications, or experience. We have argued elsewhere against such flawed logic (and economics) since size, qualifications, and experience are *precisely* the factors that are adversely impacted by discrimination (Wainwright and Holt, 2010, 65-67; Wainwright, 2000, 86-87). Nevertheless, if disparities are still observed even when such “capacity” factors are held constant, the case becomes even more compelling. The results reported in Table 7.5 show that even when levels of size, qualifications, and experience are held constant across firms, measures of disparate treatment of M/WBEs are still large, adverse, and statistically significant.

¹⁷² In the case of ties, not all 14 ranks will be present.

¹⁷³ In these two survey questions, “public sector” refers to public sector entities in general and not the City of Austin specifically.

¹⁷⁴ In these two survey questions, “public sector” refers to public sector entities in general and not the City of Austin specifically.

Table 7.4. Firms Indicating They Had Been Treated Less Favorably Due to Race and/or Gender While Participating in Business Dealings (Rankings)

Business Dealings	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total
Applying for commercial loans	5	7	3	1	4	3	3
Applying for surety bonds	12	12	11	14	12	12	13
Applying for commercial or professional insurance	10	11	12	13	11	14	11
Hiring workers from union hiring halls	14	14	14	10	14	13	14
Obtaining price quotes from suppliers or subs	8	10	10	6	10	4	10
Working or attempting to obtain work on public sector prime contracts	1	2	1	11	2	6	2
Working or attempting to obtain work on public sector subcontracts	3	5	4	12	3	9	5
Working or attempting to obtain work on private sector prime contracts	4	3	6	8	5	5	4
Working or attempting to obtain work on private sector subcontracts	6	8	7	9	7	8	7
Receiving timely payment for work performed	2	1	2	2	1	1	1
Functioning without hindrance or harassment on the work site	11	9	5	3	9	2	8
Joining or dealing with trade associations	13	13	13	7	13	11	12
Having to do inappropriate or extra work not required of comparable non-M/WBEs	7	4	8	5	6	7	6
Having to meet quality or performance standards not required of comparable non-M/WBEs	9	6	9	4	8	10	9

Source: See Table 7.2.

Table 7.4A. Veteran Firms Indicating They Had Been Treated Less Favorably While Participating in Business Dealings (Rankings)

Business Dealings	Veteran	Service-Disabled Veteran	Non-Veteran
Applying for commercial loans	7	3	4
Applying for surety bonds	13	10	11
Applying for commercial or professional insurance	10	5	12
Hiring workers from union hiring halls	13	10	14
Obtaining price quotes from suppliers or subs	9	4	10
Working or attempting to obtain work on public sector prime contracts	1	1	2
Working or attempting to obtain work on public sector subcontracts	3	9	3
Working or attempting to obtain work on private sector prime contracts	4	8	5
Working or attempting to obtain work on private sector subcontracts	8	8	8
Receiving timely payment for work performed	2	2	1
Functioning without hindrance or harassment on the work site	12	10	7
Joining or dealing with trade associations	11	10	13
Having to do inappropriate or extra work not required of comparable non-M/WBEs	5	6	6
Having to meet quality or performance standards not required of comparable non-M/WBEs	6	7	9

Source: See Table 7.2.

In Table 7.5, we report the results from a series of Probit regressions using the mail survey data on disparate treatment.¹⁷⁵ As indicated earlier, the survey questionnaire collected data related to each firm's size, qualifications, and experience. The reported estimates from these models can be interpreted as changes or differences in the probability of disparate treatment conditional on the control variables. The estimates in the table show large differences in disparate treatment probabilities between M/WBEs and non-M/WBEs. In column (1) of Table 7.5 (in which the regression model contains only M/WBE status and contracting category indicators), the estimated coefficient of 0.186 on the M/WBE variable indicates that the likelihood of experiencing disparate treatment for M/WBE firms is 18.6 percentage points higher than that for non-M/WBE firms.¹⁷⁶ This difference is statistically significant. Column (2) of Table 7.5 includes additional explanatory variables to hold constant differences in the characteristics of firms that may vary by race or gender, including the owner's education, the age of the firm, and the size of the firm measured by employment and by sales. Even after controlling for these differences, however, M/WBE firms remain 17.6 percentage points more likely than non-M/WBE firms to experience disparate treatment. This difference is also statistically significant. Firm size and other "capacity"-type characteristics account for only a miniscule portion of the disparate treatment reported by M/WBEs in the City of Austin's market area.

The exercise is repeated in columns (3) and (4). The only difference in these columns from the earlier regressions is that the M/WBE variable is now separated into two components—one for minority-owned firms and one for nonminority-female owned firms. The results in column (3) indicate that minority-owned firms in the City of Austin's market area are 28.9 percentage points more likely to experience disparate treatment than non-M/WBE firms. When controls are added in column (4), this difference falls slightly to 28.4 percentage points, indicating controlling for other "capacity"-type factors makes little difference in the incidence of disparate treatment. The differences for nonminority female-owned firms are also large and statistically significant, showing an 11.4 percentage point difference with only the industry controls and a slightly smaller 10.0 percentage point difference when the full set of capacity-type controls is added.

The exercise is repeated a final time in columns (5) and (6) with separate indicators for each type of M/WBE. The results for nonminority females are nearly identical to those in columns (3) and (4). For African American-owned firms, the differential is 39.1 percentage points in column (5), falling slightly to 38.6 percentage points after the full set of controls is added. Both differences are statistically significant. For Hispanic-owned firms, the differential is 28.2 percentage points in column (5), falling slightly to 27.3 percentage points after the full set of controls is added. Both of these differences are statistically significant. For Asian/Pacific Islander-owned firms, the differential is 21.6 percentage points in column (5), rising to 23.6 percentage points after the full set of controls is added. These differences as well are statistically significant. For Native American-owned firms, the differential is 34.0 percentage points in column (5), falling slightly to 33.1 percentage points after the full set of controls is added. These differences are also statistically significant.

¹⁷⁵ See Chapter IV for a description of Probit regression.

¹⁷⁶ This estimate largely replicates the raw difference in disparate treatment rates between M/WBE and non-M/WBE firms reported in the last row of Table 7.3. The raw differential observed there (39.2% – 24.4% = 14.8%) differs somewhat from the 18.6% differential reported here since the regression specification also controls for industry category.

Table 7.5. Prevalence of Disparate Treatment Facing M/WBEs

	(1)	(2)	(3)	(4)	(5)	(6)
M/WBE	0.186 (3.76)	0.176 (3.26)				
Minority			0.289 (5.00)	0.284 (4.52)		
Nonminority Female			0.114 (1.97)	0.100 (1.59)	0.114 (1.96)	0.100 (1.59)
African American					0.391 (4.60)	0.386 (4.20)
Hispanic					0.282 (4.34)	0.273 (3.89)
Asian/Pacific Islander					0.216 (2.43)	0.236 (2.50)
Native American					0.340 (2.88)	0.331 (2.66)
Owner's Education (3 indicator variables)	No	Yes	No	Yes	No	Yes
Firm Age (4 indicators)	No	Yes	No	Yes	No	Yes
Employment size bracket (6 indicators)	No	Yes	No	Yes	No	Yes
Sales/revenue size bracket (4 indicators)	No	Yes	No	Yes	No	Yes
Industry category (3 indicators)	Yes	Yes	Yes	Yes	Yes	Yes
N	698.00	667.00	698.00	667.00	698.00	667.00
Pseudo R ²	0.02	0.05	0.04	0.07	0.05	0.08
Chi ²	21.67	45.00	40.06	63.31	43.93	66.16
Log likelihood						

Source: See Table 7.2.

Notes: Reported estimates are derivatives from Probit models, t-statistics are in parentheses. A t-statistic of 1.96 (1.64) or larger indicates that the result is significant within a 95 (90) percent confidence interval.

A comparable exercise was conducted for VOBs and SDVOBs and reported in Table 7.5A. In column (1) of Table 7.5A (in which the regression model contains only VOB status and contracting category indicators), the estimated coefficient of 0.148 on the VOB variable indicates that the likelihood of experiencing disparate treatment for VOB firms is 14.8 percentage points higher than that for non-VOB firms. This difference is statistically significant. Column (2) of Table 7.5A includes additional explanatory variables to hold constant differences in the characteristics of firms that may vary by veteran status, including the owner's education, the age of the firm, and the size of the firm measured by employment and by sales. After controlling for these differences, VOB firms remain 13.0 percentage points more likely than non-VOB firms to experience disparate treatment. This difference is also statistically significant. Firm size and other "capacity"-type characteristics account for only a small portion of the disparate treatment reported by VOBs in the City of Austin's market area.

The exercise is repeated in columns (3) and (4) for SDVOBs. The results in columns (3) and (4) indicate that SDVOBs in the City of Austin's market area are less likely to experience disparate treatment than non-VOB firms. However, these differences are not statistically significant.

Table 7.5A. Prevalence of Disparate Treatment Facing VOBs and SDVOBs

	(1)	(2)	(3)	(4)
VOB	0.148 (2.05)	0.130 (1.75)	-0.068 (0.60)	-0.98 (0.47)
SDVOB				
Owner's Education (3 indicator variables)	No	Yes	No	Yes
Firm Age (4 indicators)	No	Yes	No	Yes
Employment size bracket (6 indicators)	No	Yes	No	Yes
Sales/revenue size bracket (4 indicators)	No	Yes	No	Yes
Industry category (3 indicators)	Yes	Yes	Yes	Yes
N	698.00	667.00	698.00	667.00
Pseudo R ²	0.01	0.04	0.01	0.04
Chi ²	11.11	37.00	11.38	37.53
Log likelihood				

Source: See Table 7.2.

Notes: Reported estimates are derivatives from Probit models, t-statistics are in parentheses. A t-statistic of 1.96 (1.64) or larger indicates that the result is significant within a 95 (90) percent confidence interval.

Table 7.6. Prevalence of Disparate Treatment Facing M/WBEs, by Type of Business Dealing

Business Dealings	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total
Applying for commercial loans	40.9% (2.69)	19.9% (1.73)	38.1% (2.36)	54.9% (2.81)	24.3% (2.43)	11.2% (1.12)	13.5% (1.95)
Applying for surety bonds	9.5% (1.14)	3.0% (0.62)	0.8% (0.12)	0.0% (0.00)	2.4% (0.60)	-3.1% (-0.75)	0.5% (0.12)
Applying for commercial or professional insurance	15.0% (2.38)	6.2% (1.60)	0.9% (0.21)	3.6% (0.55)	5.5% (1.71)	-2.6% (-0.84)	2.3% (0.78)
Hiring workers from union hiring halls	16.6% (1.13)	10.4% (1.28)	0.0% (0.00)	50.3% (1.83)	9.5% (1.47)	4.2% (0.78)	3.7% (1.24)
Obtaining price quotes from suppliers or subcontractors	17.0% (1.86)	7.4% (1.22)	0.1% (0.02)	13.1% (1.22)	7.7% (1.46)	5.7% (1.11)	5.6% (1.36)
Working or attempting to obtain work on public sector prime contracts	39.8% (3.63)	7.0% (1.02)	12.3% (1.22)	-3.7% (-0.33)	10.6% (1.73)	-12.2% (-1.98)	0.7% (0.11)
Working or attempting to obtain work on public sector subcontracts	31.4% (3.03)	0.1% (0.02)	7.6% (0.87)	0.1% (0.01)	4.8% (0.88)	-10.6% (-1.92)	-1.7% (-0.30)
Working or attempting to obtain work on private sector prime contracts	40.4% (3.79)	16.2% (2.32)	17.5% (1.87)	14.9% (1.20)	16.9% (2.88)	2.0% (0.35)	8.7% (1.88)
Working or attempting to obtain work on private sector subcontracts	52.3% (4.31)	20.0% (2.55)	30.6% (2.76)	28.2% (2.05)	21.3% (3.33)	8.8% (1.40)	11.0% (2.66)
Receiving timely payment for work performed	42.8% (4.01)	23.4% (2.92)	23.8% (2.21)	32.3% (2.29)	24.9% (3.58)	11.5% (1.71)	14.8% (2.82)
Functioning without hindrance or harassment on the work site	12.1% (1.36)	10.6% (1.68)	28.2% (2.83)	37.6% (2.85)	13.8% (2.51)	7.5% (1.44)	7.9% (2.09)
Joining or dealing with construction trade associations	4.2% (1.69)	1.0% (1.16)	2.2% (1.10)	6.1% (1.53)	1.1% (1.62)	0.7% (1.09)	0.5% (1.44)
Having to do inappropriate or extra work not required of comparable non-M/WBEs	24.2% (2.48)	14.3% (2.20)	16.3% (1.76)	25.1% (2.07)	14.3% (2.62)	0.4% (0.08)	7.0% (1.59)
Having to meet quality, inspection, or performance standards not required of comparable non-M/WBEs	13.9% (1.74)	11.0% (1.94)	11.3% (1.39)	17.8% (1.72)	10.3% (2.19)	-0.4% (-0.08)	5.0% (1.33)
In any one of the business dealings listed above	38.6% (4.20)	27.3% (3.89)	23.6% (2.50)	33.1% (2.66)	28.4% (4.52)	10.0% (1.59)	17.6% (3.26)

Source: See Table 7.2.

Notes: Reported estimates are derivatives from Probit models with specification such as in Table 7.5, column (2). The t-statistics are in parentheses. A t-statistic of 1.96 (1.64) or larger indicates that the result is significant within a 95 (90) percent confidence interval. Results with t-statistics of 1.96 or higher are **boldfaced**. Results with t-statistics of 1.64 or higher are **boldfaced italicized**.

The regression models reported in Table 7.5 used as their dependent variable an indicator of whether or not a survey respondent reported having been treated less favorably in *any* of the 14 different types of business dealings described in the first column of Table 7.3. We re-estimated the regression model reported in Column (2) of Table 7.5 separately using as the dependent variable, in turn, each of the 14 types of business dealings and report those results in Table 7.6. As Table 7.6 shows, African American-owned firms, in particular, experience a wide variety of disparate treatment compared to non-M/WBEs. In 11 of 14 categories, the differences for African American-owned firms are both large and statistically significant. The same is true for Hispanic-owned firms in 7 of 14 categories, for Asians/Pacific Islanders in 6 of 14 categories, for Native Americans in 8 of 14 categories, for minorities as a group in 9 of 14 categories, and for M/WBEs as a group in 5 of 14 categories.

We conducted a similar exercise, reported in Table 7.6A, for VOBs and SDVOBs, and found that VOBs and SDVOBs reported large and statistically significant amounts of disparate treatment when working or attempting to work on public sector prime contracts. In addition, VOBs were found to have large and statistically significant amounts of disparate treatment overall, compared to non-VOBs.

Table 7.6A. Prevalence of Disparate Treatment Facing VOBs and SDVOBs, by Type of Business Dealing

Business Dealings	Veteran	Service-Disabled Veteran
Applying for commercial loans	-4.42% (0.61)	4.4% (0.41)
Applying for surety bonds	n/a	n/a
Applying for commercial or professional insurance	6.1% (1.46)	8.4% (1.28)
Hiring workers from union hiring halls	n/a	n/a
Obtaining price quotes from suppliers or subcontractors	2.3% (0.40)	8.6% (0.92)
Working or attempting to obtain work on public sector prime contracts	25.8% (3.01)	24.8% (1.92)
Working or attempting to obtain work on public sector subcontracts	11.2% (1.48)	-9.9% (1.12)
Working or attempting to obtain work on private sector prime contracts	8.6% (1.28)	-5.0% (0.56)
Working or attempting to obtain work on private sector subcontracts	5.7% (0.87)	1.1% (0.13)
Receiving timely payment for work performed	4.4% (0.65)	0.8% (0.08)
Functioning without hindrance or harassment on the work site	-7.9% (1.62)	7.5% (1.14)
Joining or dealing with construction trade associations	1.3% (1.10)	n/a
Having to do inappropriate or extra work not required of comparable non-M/WBEs	3.8% (0.56)	1.1% (0.10)
Having to meet quality, inspection, or performance standards not required of comparable non-M/WBEs	4.2% (0.77)	0.90% (0.11)
In any one of the business dealings listed above	<i>13.0%</i> <i>(1.75)</i>	-9.8% (0.72)

Source: See Table 7.2.

Notes: Reported estimates are derivatives from Probit models with specification such as in Table 7.5, column (2). The t-statistics are in parentheses. A t-statistic of 1.96 (1.64) or larger indicates that the result is significant within a 95 (90) percent confidence interval. Results with t-statistics of 1.96 or higher are **boldfaced**. Results with t-statistics of 1.64 or higher are **boldfaced italicized**.

4. Impact of Current Business Environment on Ability to Win Contracts

The survey asked questions about some common features of the business environment to determine which factors were perceived by M/WBEs as serious impediments to obtaining contracts. As Table 7.7 indicates, substantial percentages of both M/WBEs and non-M/WBEs report that certain factors, such as “Late Notice of Bid/Proposal Deadlines,” “Large project sizes,” “Bonding requirements,” “Cost of bidding and proposing,” and “Obtaining working capital” make it harder or impossible for their firms to obtain contracts. Among non-M/WBEs, for example, 37 percent reported that late notice of bid/proposal deadlines made it harder or impossible for them to win contracts, 23 percent reported that large project sizes had this effect, 23 percent reported that bonding requirements had this effect, 22 percent reported that the cost of bidding and proposing had this effect, and 19 percent reported that obtaining working capital had this effect. The figures for M/WBEs in these five categories, however, at 48 percent, 46 percent, 37 percent, 35 percent, and 34 percent, respectively, are significantly higher than those for non-M/WBEs. Indeed, as Table 7.7 shows, M/WBEs reported significantly more difficulty than non-M/WBEs on eight of the nine factors about which they were polled. In general, the rates at which M/WBEs reported difficulty with these factors were between 1.3 to 2.1 times the rates reported by non-M/WBEs.

Table 7.7A shows comparable results for VOBs and SDVOBs. As with Table 7.7, substantial percentages of VOBs and SDVOBs report that certain factors, such as “Late notice of bid/proposal deadlines,” “Obtaining working capital,” “Large project sizes,” “Cost of bidding and proposing,” and “Bonding requirements” make it harder or impossible for their firms to obtain contracts. SDVOBs, in particular, exhibited statistically significant differences relative to non-VOBs on all nine of the factors the survey asked about.

Table 7.7. Firms Indicating that Specific Factors in the Business Environment Make It Harder or Impossible to Obtain Contracts—Sample Differences

Business Environment	African American	Hispanic	Asian/ Pacific Islander	Native American	Minority Total	Non-minority Female	M/WBE Total	Non-M/WBEs
Bonding Requirements	38.5% (26)	38.8% (80)	35.3% (17)	54.5% (11)	39.6% (134)	33.6% (113)	36.8% (247)	22.5% (71)
Insurance Requirements	22.0% (41)	25.9% (112)	22.9% (35)	50.0% (14)	26.2% (202)	24.7% (186)	25.5% (388)	18.5% (108)
Previous Experience Requirements	30.4% (46)	22.9% (109)	23.7% (38)	40.0% (15)	26.0% (208)	14.6% (226)	20.0% (434)	13.3% (105)
Cost of Bidding or Proposing	41.5% (41)	31.7% (104)	41.2% (34)	42.9% (14)	36.3% (193)	33.9% (192)	35.1% (385)	22.1% (104)
Large Project Sizes	61.5% (39)	43.7% (103)	48.6% (35)	46.2% (13)	48.4% (190)	44.1% (195)	46.2% (385)	22.6% (93)
Price of Supplies or Materials	25.6% (39)	22.1% (104)	36.7% (30)	28.6% (14)	25.7% (187)	25.1% (191)	25.4% (378)	17.7% (96)
Obtaining Working Capital	56.8% (37)	39.8% (98)	43.8% (32)	38.5% (13)	43.9% (180)	24.1% (170)	34.3% (350)	18.7% (91)
Late Notice of Bid/Proposal Deadlines	54.1% (37)	51.4% (109)	56.3% (32)	50.0% (14)	52.6% (192)	42.5% (186)	47.6% (378)	36.9% (84)
Prior Dealings with Owner	14.3% (42)	13.8% (109)	30.3% (33)	23.1% (13)	17.3% (197)	8.5% (212)	12.7% (409)	15.0% (100)

Source: See Table 7.2.

Notes: Total number of valid responses in parentheses. Figures in **boldface** type are adverse and statistically significantly different from non-M/WBEs using a conventional two-tailed Fisher's Exact Test and within a 95% or better confidence interval. Figures in **boldface italicized** type are adverse and significant within a 90% confidence interval.

Table 7.7A. VOB Firms Indicating that Specific Factors in the Business Environment Make It Harder or Impossible to Obtain Contracts—Sample Differences

Business Environment	Veteran	Service-Disabled Veteran
Bonding Requirements	19.6% (10)	36.0% (9)
Insurance Requirements	17.7% (9)	32.0% (8)
Previous Experience Requirements	24.5% (12)	29.2% (7)
Cost of Bidding or Proposing	31.4% (16)	44.0% (11)
Large Project Sizes	32.7% (16)	47.8% (11)
Price of Supplies or Materials	21.6% (11)	40.0% (10)
Obtaining Working Capital	26.0% (13)	48.0% (12)
Late Notice of Bid/Proposal Deadlines	37.3% (19)	52.0% (13)
Prior Dealings with Owner	15.7% (8)	29.2% (7)

Source: See Table 7.2.

Notes: Total number of valid responses in parentheses. Figures in **boldface** type are adverse and statistically significantly different from non-M/WBEs using a conventional two-tailed Fisher's Exact Test and within a 95% or better confidence interval. Figures in **boldface italicized** type are adverse and significant within a 90% confidence interval.

To control for firm and owner characteristics, we used a regression technique known as ordered Probit.¹⁷⁷ Ordered Probit regression is used when the dependent variable is discrete and ordinal (and hence can be ranked). We use ordered Probit to model the ordinal ranking—(1) “helps me,” (2) “has no effect,” (3) “makes it harder,” or (4) “makes it impossible”—of the aspect of procurement under consideration. The firm characteristics used as control variables consist of the age of the firm, the number of employees, the size of revenues, the education level of the primary owner of the firm and the major industry group. To report results from ordered Probit analysis, we use a “+” to indicate that M/WBEs had more difficulty than non-M/WBEs with similar firm characteristics, and a “–” to indicate that M/WBEs had less difficulty than non-M/WBEs with similar firm characteristics.

Table 7.8 reports the sign and statistical significance from the ordered Probit analysis. We find that when observable firm characteristics are controlled for, all nine of the factors we inquired about prove to be greater difficulties for M/WBEs than for non-M/WBEs (as indicated by the “+” sign), even when “capacity”-type factors such as employment size, revenue size, years in business, and owner education are held constant. The disparities observed regarding the cost of bidding or proposing, large project sizes, and late notice of bid/proposal deadlines, in particular, was statistically significant with respect to non-M/WBEs.

Table 7.8. Firms Indicating that Specific Factors in the Business Environment Make It Harder or Impossible for M/WBEs to Obtain Contracts, Regression Results

Business Environment	M/WBEs
Bonding Requirements	+
Insurance Requirements	+
Previous Experience Requirements	+
Cost of Bidding or Proposing	+*
Large Project Sizes	+*
Price of Supplies or Materials	+
Obtaining Working Capital	+
Late Notice of Bid/Proposal Deadlines	+*
Prior Dealings with Owner	+

Source: See Table 7.2.

Notes: A plus (+) indicates that a group is more likely than non-M/WBEs to report difficulty with business environment factors. A minus (–) indicates that a group is less likely than non-M/WBEs to experience difficulty. An asterisk (*) indicates that the disparity is statistically significant within a 95% or better confidence interval. A dagger (†) indicates that the disparity is statistically significant within a 90% or better confidence interval.

¹⁷⁷ For a textbook discussion of ordered Probit, see, for example, Greene (1997).

Table 7.8A reports the sign and statistical significance from a comparable ordered Probit analysis of VOBs. We find that when observable firm characteristics are controlled for, six of the nine of the factors we inquired about prove to be greater difficulties for VOBs than for non-VOBs (as indicated by the “+” sign), even when “capacity”-type factors such as employment size, revenue size, years in business, and owner education are held constant. The disparities observed regarding previous experience requirements and prior dealings with owners, were not only adverse but were also statistically significant with respect to non-VOBs.

Table 7.8A. Firms Indicating that Specific Factors in the Business Environment Make It Harder or Impossible for VOBs to Obtain Contracts, Regression Results

Business Environment	M/WBEs
Bonding Requirements	— [†]
Insurance Requirements	—
Previous Experience Requirements	+ [†]
Cost of Bidding or Proposing	+
Large Project Sizes	—
Price of Supplies or Materials	+
Obtaining Working Capital	+
Late Notice of Bid/Proposal Deadlines	+
Prior Dealings with Owner	+ [†]

Source: See Table 7.2.

Notes: A plus (+) indicates that a group is more likely than non-VOBs to report difficulty with business environment factors. A minus (—) indicates that a group is less likely than non-VOBs to experience difficulty. An asterisk (*) indicates that the disparity is statistically significant within a 95% or better confidence interval. A dagger (†) indicates that the disparity is statistically significant within a 90% or better confidence interval.

Table 7.8B reports the sign and statistical significance from a comparable ordered Probit analysis of SDVOBs. We find that when observable firm characteristics are controlled for, all nine of the factors we inquired about prove to be greater difficulties for SDVOBs than for non-VOBs (as indicated by the “+” sign), even when “capacity”-type factors such as employment size, revenue size, years in business, and owner education are held constant. The disparities observed regarding the cost of bidding or proposing, large project sizes, and late notice of bid/proposal deadlines, were not only adverse but were also statistically significant with respect to non-VOBs.

Table 7.8B. Firms Indicating that Specific Factors in the Business Environment Make It Harder or Impossible for SDVOBs to Obtain Contracts, Regression Results

Business Environment	M/WBEs
Bonding Requirements	+
Insurance Requirements	+
Previous Experience Requirements	+
Cost of Bidding or Proposing	+*
Large Project Sizes	+*
Price of Supplies or Materials	+
Obtaining Working Capital	+
Late Notice of Bid/Proposal Deadlines	+*
Prior Dealings with Owner	+

Source: See Table 7.2.

Notes: A plus (+) indicates that a group is more likely than non-VOBs to report difficulty with business environment factors. A minus (–) indicates that a group is less likely than non-VOBs to experience difficulty. An asterisk (*) indicates that the disparity is statistically significant within a 95% or better confidence interval. A dagger (†) indicates that the disparity is statistically significant within a 90% or better confidence interval.

5. Solicitation and Use of M/WBEs on Public and Private Projects Without Affirmative Action Goals

Our second to last survey question asked, “How often do prime contractors who use your firm as a subcontractor on public-sector projects with requirements for minority, women and/or disadvantaged businesses also *hire* your firm on projects (public or private) *without* such goals or requirements?” As Table 7.9 shows, 76 percent of African American-owned firms, 66 percent of Hispanic-owned firms, 68 percent of Asian/Pacific Islander-owned firms, 73 percent of Native American-owned firms, and 56 percent of nonminority female-owned firms responded that this seldom or never occurs. For minorities as a group the figure was 69 percent and for M/WBEs as a group the figure was 63 percent. Similar results were observed by major contracting category as well.

Table 7.9. Percent of M/WBEs Indicating that Prime Contractors Who Use Them as Subcontractors on Projects with Goals Seldom or Never Hire Them on Projects without Such Goals

M/WBE Group	All Industries	Construction	Professional Services	Nonprofessional Services	Commodities
African American	76.3% (38)	71.4% (7)	57.1% (7)	84.2% (19)	80.0% (5)
Hispanic	66.3% (89)	66.7% (24)	73.3% (15)	71.8% (39)	36.4% (11)
Asian/Pacific Islander	67.6% (37)	0.0% (1)	87.5% (8)	65.4% (26)	50.0% (2)
Native American	73.3% (15)	25.0% (4)	- (0)	100.0% (6)	80.0% (5)
Minority Total	69.3% (179)	61.1% (36)	73.3% (30)	74.4% (90)	56.5% (23)
Nonminority Female	55.5% (173)	36.4% (22)	31.3% (32)	67.5% (80)	61.5% (39)
M/WBE Total	62.5% (352)	51.7% (58)	51.6% (62)	71.2% (170)	59.7% (62)

Source and Note: See Table 7.2.

Table 7.9A. Percent of VOBs and SDVOBs Indicating that Prime Contractors Who Use Them as Subcontractors on Projects with Goals Seldom or Never Hire Them on Projects without Such Goals

Group	All Industries	Construction	Professional Services	Nonprofessional Services	Commodities
Veterans	88.0% (22)	100.0% (4)	100.0% (4)	85.7% (12)	66.7% (2)
Service-Disabled Veterans	86.7% (13)	100.0% (4)	100.0% (2)	88.9% (8)	0.0% (0)

Source and Note: See Table 7.2.

Table 7.9A shows comparable information for VOBs and SDVOBs. Among VOBs, 88 percent responded that they are seldom or never hired by prime contractors who used them on projects with VOB goals for projects without such goals. Among SDVOBs, the figure was 87 percent. Similar results were generally observed by major contracting category.

At least one court has held that the failure of prime contractors to even *solicit* qualified minority- and women-owned firms is a “market failure” that serves to establish a government’s compelling interest in remedying that failure.¹⁷⁸ Among the evidence relied upon for this holding was a NERA survey similar to the current one in which approximately 50 percent of the respondents reported that they were seldom or never solicited for non-goals work.¹⁷⁹

¹⁷⁸ *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725, 737 (N.D. Ill. 2003).

¹⁷⁹ *Id.*

Our final survey question therefore asked “How often do prime contractors who use your firm as a subcontractor on public-sector projects with requirements for minority, women and/or disadvantaged businesses *solicit* your firm on projects (public or private) *without* such goals or requirements?” Responses to this question are tabulated in Table 7.10, which shows the same pattern as in Table 7.9. In Table 7.10, 77 percent of African American-owned firms, 62 percent of Hispanic-owned firms, 74 percent of Asian/Pacific Islander-owned firms, 64 percent of Native American-owned firms, and 58 percent of nonminority female-owned firms responded that this seldom or never occurs. For minorities as a group the figure was 67 percent and for M/WBEs as a group the figure was 63 percent. Similar results were observed in each major contracting category as well.

Table 7.10. Percent of M/WBEs Indicating that Prime Contractors Who Use Them as Subcontractors on Projects with Goals Seldom or Never *Solicit* Them on Projects without Such Goals

M/WBE Group	All Industries	Construction	Professional Services	Nonprofessional Services	Commodities
African American	76.5% (34)	83.3% (6)	57.1% (7)	82.4% (17)	75.0% (4)
Hispanic	61.8% (89)	60.0% (25)	78.6% (14)	63.2% (38)	41.7% (12)
Asian/Pacific Islander	74.3% (35)	50.0% (2)	100.0% (7)	66.7% (24)	100.0% (2)
Native American	64.3% (14)	25.0% (4)	- (0)	80.0% (5)	80.0% (5)
Minority Total	67.4% (172)	59.5% (37)	78.6% (28)	69.0% (84)	60.9% (23)
Nonminority Female	58.4% (161)	42.1% (19)	27.6% (29)	69.2% (78)	68.6% (35)
M/WBE Total	63.1% (333)	53.6% (56)	52.6% (57)	69.1% (162)	65.5% (58)

Source and Note: See Table 7.2.

Table 7.10A shows comparable information for VOBs and SDVOBs. Among VOBs, 75 percent responded that they are seldom or never solicited by prime contractors who used them on projects with VOB goals for projects without such goals. Among SDVOBs, the figure was 80 percent. Similar results were generally observed by major contracting category.

Table 7.10A. Percent of VOBs and SDVOBs Indicating that Prime Contractors Who Use Them as Subcontractors on Projects with Goals Seldom or Never *Solicit* Them on Projects without Such Goals

Group	All Industries	Construction	Professional Services	Nonprofessional Services	Commodities
Veterans	75.0% (18)	80.0% (4)	100.0% (4)	66.7% (8)	66.7% (2)
Service-Disabled Veterans	80.0% (12)	80.0% (4)	100.0% (1)	87.5% (7)	0.0% (0)

Source and Note: See Table 7.2.

6. Impact of Survey Non-Response

Since the mail survey was voluntary, it is important to account for the fact that a majority of those who received it did not respond. As a check on the usefulness of the information obtained from our mail survey respondents, we conducted telephone surveys of 2,500 randomly selected M/WBEs and non-M/WBEs that did not respond to our mail survey. The purpose of this “non-response” survey is to test whether their answers to key survey questions were different from the answers of respondents in ways that would call into question the relevance of the information obtained from our mail survey respondents.

We obtained complete responses from 687 firms, for a raw response rate of 27.5 percent. After removing duplicate records, records where the firm was no longer in business, and records where the telephone number was disconnected or otherwise unusable, the effective response rate increased to 38.5 percent.

For the non-respondent survey, we selected three questions from the mail survey to pose to non-respondents. The first question asked whether large project sizes helped or harmed the firm’s ability to obtain public or private sector contracts. The second question asked whether and how frequently the firm had experienced discrimination in attempting to apply for commercial loans. The final question asked whether and how frequently the firm had experienced discrimination in working or attempting to work on private sector prime contracts.

Not surprisingly, one difference that we observed between respondents and non-respondents was a greater general interest in the questions being asked. Among survey respondents, only 31.1 percent indicated that the question about large project sizes was “not applicable.” Among non-respondents, the figure was 52.5 percent. Approximately 39.3 percent of survey respondents indicated that discrimination in applying for commercial loans never occurred, compared to 72.9 percent among non-respondents. Approximately 46.2 percent of survey respondents indicated that discrimination in working or attempting to work on private sector prime contracts never occurred, compared to 74.1 percent among non-respondents. This phenomenon was apparent regardless of whether the firm was minority-owned, women-owned, or nonminority male-owned.

Among those firms to which the question was applicable, 18.4 percent of minority-owned firms that did not respond to the mail survey indicated that large project sizes made it harder or impossible for them to obtain contract awards. Among those that did respond to the survey, the figure was 48.9 percent. Among female-owned firms that did not respond to the mail survey, 17.3 percent indicated that large project sizes made it harder or impossible for them to obtain contract awards. Among those that did respond to the survey, the figure was 46.0 percent. Both of these differences are statistically significant.¹⁸⁰ Among nonminority male-owned firms that did not respond to the mail survey, 10.0 percent indicated that large project sizes made it harder or impossible for them to obtain contract awards. Among those that did respond to the survey, the figure was 22.1 percent. Each of these differences is statistically significant.

¹⁸⁰ The percentages reported in this section may differ slightly from comparable figures reported elsewhere in Chapter VII, since minorities of unknown race or ethnicity were excluded from the tallies in the mail survey.

We see from these results that more M/WBEs than non-M/WBEs report that large project sizes make it harder or impossible for them to obtain contracts, regardless of whether they responded to the mail survey or not. We also see that reports that large project sizes make it hard or impossible for firms to obtain contracts are greater among mail survey respondents than among non-respondents, regardless of M/WBE status. However, the ratio of M/WBEs to non-M/WBEs reporting difficulty in this regard is not statistically different between respondents and non-respondents, implying that the estimate of adverse disparity for M/WBE firms with regard to large project sizes that was reported from the mail survey (see Tables 7.7 and 7.8) is representative of the universe of firms as a whole.

Among those firms to which the question was applicable, 9.0 percent of minority-owned firms that did not respond to the mail survey indicated that they had experienced one or more instances of discrimination during the previous five years in applying for commercial loans. Among those that did respond to the survey, the figure was 24.6 percent. For female-owned firms, 4.8 percent of those that did not respond to the mail survey indicated that they had experienced one or more instances of discrimination during the previous five years in applying for commercial loans. Among those that did respond to the survey, the figure was 17.2 percent. Both of these differences are statistically significant. Among nonminority male-owned firms that did not respond to the mail survey, 4.0 percent indicated that they had experienced one or more instances of discrimination during the previous five years in applying for commercial loans. Among those that did respond to the survey, the figure was 2.9 percent. This difference is not statistically significant.

We see from these results that more M/WBEs than non-M/WBEs report experiencing discrimination in applying for commercial loans during the previous five years, regardless of whether they responded to the mail survey or not. However, the ratio of M/WBEs to non-M/WBEs reporting discrimination is statistically larger among respondents than non-respondents, indicating that the estimate of adverse disparity for M/WBE firms with regard to discrimination in applying for commercial loans reported from the mail survey (see Tables 7.3, 7.4 and 7.6) is somewhat larger than what is likely to be observed in the universe of firms as a whole.

Among those firms to which the question was applicable, 6.3 percent of minority-owned firms that did not respond to the mail survey indicated that they had experienced one or more instances of discrimination during the previous five years in working or attempting to work on private sector prime contracts. Among those that did respond to the survey, the figure was 24.5 percent. For female-owned firms, 5.2 percent of those that did not respond to the mail survey indicated that they had experienced one or more instances of discrimination during the previous five years in working or attempting to work on private sector prime contracts. Among those that did respond to the survey, the figure was 14.6 percent. Both of these differences are statistically significant. Among nonminority male-owned firms that did not respond to the mail survey, 4.9 percent indicated that they had experienced one or more instances of discrimination during the previous five years in working or attempting to work on private sector prime contracts. Among those that did respond to the survey, the figure was 8.1 percent. This difference is not statistically significant.

Once again, these results show that more M/WBEs than non-M/WBEs report experiencing discrimination in working or attempting to work on private sector prime contracts during the previous five years. They also show that reports of discrimination are greater among mail survey respondents than among non-respondents, regardless of M/WBE status. As with the previous question, the ratio of M/WBEs to non-M/WBEs reporting discrimination is statistically larger among respondents than non-respondents, indicating that the estimate of adverse disparity for M/WBE firms with regard to discrimination in working or attempting to work on private sector prime contracts shown above (see Tables 7.3, 7.4 and 7.6) is somewhat larger than what is likely to be observed in the universe of firms as a whole.

In conclusion, the results of our non-respondent survey indicate that both M/WBEs and non-M/WBEs are more likely to have responded to the mail survey if they had experienced the difficulties identified in the mail survey and also that M/WBEs reported greater difficulties than non-M/WBEs whether or not they responded to the mail survey. For one of the three questions we examined, this means the actual disparities facing M/WBEs are approximately equal to what we estimated in our mail survey. For two of the questions, the actual disparities facing M/WBEs are likely to be somewhat smaller than what we estimated in our mail survey. For all three questions examined, however, the basic qualitative finding of more problems and greater disparities being observed among M/WBEs than among non-M/WBEs is unchanged.

C. Business Owner Interviews

To explore additional anecdotal evidence of possible discrimination against minorities and women (collectively, M/WBEs) in the Austin market area, we conducted six focus group and five stakeholder meetings. We met with 192 business owners or representatives from a broad cross section of the industries from which the City of Austin purchases services and goods. Firms ranged in size from large national businesses to new startups. Owners' backgrounds included individuals with decades of experience in their fields and entrepreneurs at the start of their business careers. We sought to explore their experiences with discrimination in seeking and performing public and private sector contracting opportunities, and with the City of Austin's M/WBE Program.

This effort gathered individual perspectives to augment the statistical information in the study, including that from the business experience surveys. In general, interviewees' individual experiences echoed the responses to the business experience surveys. We also elicited feedback, both positive and negative, on the City of Austin's M/WBE Ordinance and on the City departments with responsibilities for implementing the Ordinance, along with corresponding recommendations for improvements. These are reported below in Chapter VIII.

The following are summaries of the issues discussed. Quotations are indented, and are intended to represent the views expressed by multiple participants.

1. Perceptions of Competence and Qualifications and Higher Performance Standards

Although many, during the interviews, recognized that while there had been significant progress integrating minorities and women into the City of Austin's public and private sector contracting

activities, many barriers remain. Although not necessarily quantifiable, one persistent theme in the interviews was the continuing influence of negative perceptions and stereotypes. These stereotypes of inferiority and lack of competence infect all aspects of the M/WBEs' attempts to obtain contracts and to be treated equally in performing contract work. Minorities and women repeatedly discussed their struggles with negative perceptions and attitudes of their capabilities in the business world. Although less overt, there was no disagreement that racism and gender discrimination continue to persist in City of Austin public and private sector contracting.

I don't know why but there's a lot of discrimination.

So, I can honestly say, I see time and time again, that minority businesses are not being brought to the table. Particularly African American business.

An African American female business owner commented on her experience.

You've got to be not just good [but], better, best, outstanding. And you're still getting, you don't get any recognition for it. But you've got to be better than everybody. I mean I even find that what I do just in the consulting business. I've got to go extra steps more than someone else just to do that work because you know, they evaluate you differently.

A Hispanic construction contractor commented on a recent experience.

One time, the worst time, was I walked up a ditch and ...it was over five foot [deep] and there [were] three Mexicans down there and to the foreman, who was white, I said "You can't do this. You're over five foot, you need trench protection." And he looks at me and goes "they're only Mexicans."

Another reason I don't want to work for a general contractors that are there is because when we tried to work with them before, they told us they don't deal with Wal-Mart people...They told us that we were lower class than them.

And continuously messing with minority contractors, because I know a lot of Hispanic contractors that have issues with the same GC, not just African Americans.

One African American contractor stated that the negative view of a majority prime contractor toward minority contractors was clearly expressed in a recent meeting.

So, we had a private meeting with SMBR. And one of the GCs stated, one of the personnel for the GC stated in the meeting, even with SMBR [there in the room], “We don’t need to work with companies like you. We can work with the City without you.”

Well one was that situation for sure and there were many situations that occurred like that. Situations where we would be in meetings and I have a senior vice president in the meeting who is, speaking to someone seated next to him that he is going to, I’m trying to think of the term he used, again...that he was going to do something to the monkeys in the gallery. You know, we’re sitting in a meeting and I hear him saying this. He’s going to throw peanuts at the monkeys in the gallery. Sitting behind us. You know....I’m just saying that attitude where you have that level of comfort thinking you can talk to people like that or you could say that and know you might get overheard.

An Asian contractor reported that a contractor refused to do business with him because of his accent.

[H]e mentioned to me that they didn’t, they found him hard to understand. Didn’t want to do business with him because of...how he talked.

A white female business owner concluded that the only reason the nonminority prime contractors will use her firm is because of the goals:

I have reached out to each one of these primes. I also filled out the mentor protégé program...and I said, “why don’t you use us a sub...allow us to service our capacity with a five percent or ten percent goal.” But they said, “the City has not done any set aside for this particular project.”

Yeah, we’ve been certified for probably seven years and we’ve made \$14,000 as a sub to a prime and honestly, they came to me and said, “We have to give his percentage to a city certified woman and we’ll just write the check. You know, we don’t care if you do any work or not.”

A Hispanic firm shared a similar experience regarding the outreach efforts of majority contractors.

Because they will flat out tell you. I’m using you because I need your Hispanic work points...They don’t say I’m using you because you are good, and that’s kind of insulting you know.

A significant number of M/WBE firms believe that the nonminority male contracting community does not make an honest effort to work with M/WBE firms.

And I actually think that most of the time what I am is just proposal fodder and a pricing point for somebody who's already got the job and they want to make sure that the people they are giving the job to are in line with the pricing. I mean, that's just my perception.

I have met with several that will tell you, "The only reason I am doing this is because I have to."

And we, remember where we are now. We are still in the South. We are still in an environment in the construction arena where you still have a lot of people who absolutely are just not good people, number one, and who are closet Klansmen and who are absolutely opposed to affirmative action and who have belief systems that I don't have to do that, I don't have to do it in the private sector. Why do I have to do it here?

Many nonminority professional services and construction firms that were interviewed questioned the competency of most M/WBE firms.

And so typically when we've been provided like certain percentages that we have to meet, we find it really challenging. Especially since what our company does is so diverse. I mean we can do so much in-house and we're forced to subconsult out to people who quite frankly might not be as qualified as we are.

Part of doing business is taking care of all that you just listed when you were standing over here a minute ago; being on time, having your materials ready, showing up, and doing the work productively. You know, those are the things you have to do to be in business and stay in business. And I think there's too many companies on that [SMBR's vendor] list who are not taking care of business.

[T]he city sees all of these checkmarks and they go, "Look, there's a ton of these people who can do the work." And you're going, "No, they can't. They say they can but they can't."

[We provide] professional travel demand modeling ... and they're asking us to go out and count cars.

Everybody in this industry knows. They know I do excellent work. Why are you carving me out? I am [providing a particular construction service] across the street and another company is [providing the same service] on the other side. What do you call that? Let's call it discrimination maybe.

The nonminority firms, particularly in Construction and Professional Services, were especially critical of the Good Faith Efforts requirement¹⁸¹ of sending notices to M/WBE firms and considered the exercise unnecessary and time consuming, especially in cases where the bidder already intended to meet the goals using City-certified M/WBEs.

That's correct. If, we have to identify each opportunity. So in addition to material as this young lady said, if we are going to rent dumpsters, if we are going to rent equipment, if we're going to rent a fence...even if we use this women-owned business and meet about a 40 percent goal because we're going to buy the material through her. We are still are obligated to exorcise those demons so to speak.

So, then I am standing at my fax machines, and there is a zillion fax numbers that aren't correct, so then am I going to be dinged because I didn't get my second notice into that person. So, then I'm on the phone calling. The whole time, I'm like please, don't anybody call me back because I already got my team.

SMBR changed the GFE requirements [so that] even if you have met the goals on a project, you still have to produce GFE documents. Personally, I think this is ludicrous because [if] the goals are met, the M/WBE would be on the availability list, so it would seem they are already certified to provide the service. This adds to the frustration of primes having to contact everyone on the availability list....Documentation overload.

An MBE owner reported a contrary position that the non-responsiveness of some contractors to return phone calls was a byproduct of the pressures of the industry.

I kind of understand from the general because I work as a general and a sub. When you bid a job, during the bidding or the week of, they are so busy trying to put all the numbers together, I think that why we don't get phone calls back.

Nonminority firms in Construction and Professional Services were also critical of the Good Faith Effort's review process by SMBR:

I think if the [staff person] was able to look at the totality of what you've submitted. And I think you can make a fairly reasonable...I mean I think you can look at the documents submitted and I think you can make a reasonable assumption whether someone honestly

¹⁸¹ See Austin, Tex. Code §§ 2-9A-21; 2-9B-21; 2-9C-21 and 2-9D-21.

tried or not.... Instead of sticking by standards...that, quite frankly, are not a demonstration of Good Faith.

Many minority contractors were also critical of the Good Faith Efforts review process by SMBR.

[G]ood Faith Effort definition and implementation of it, that's a big problem. And SMBR has made attempts to strengthen that but they do not focus on the right elements...Meaning "Good Faith" is not the number of faxes you sent out.

But what makes it such a bigger waste of time is that you have construction contractors sending architects and engineers invitations to bid, and they are using that to qualify their Good Faith Effort. That's a loophole in the system.

This is not to suggest that the experience of majority contractors as well as minority- and women-owned businesses is always negative.

I mean we've developed one good working relationship with an inspection company in the New Braunfels area that we probably would not have come across had we not had this [M/WBE Program]. And we've been working with them for probably four or five years on city projects as well as non-city projects when we had the need.

I do feel I have grown—I said I have grown from the program. My growth is not necessarily program generated. My growth is because of general contractors who take this seriously. And so there are certain general contractors that I have been fortunate to develop relationships with that have been great from my standpoint.

Some nonminority professional service contractors and construction contractors were complimentary of the process upon putting together strong teams, and supported the goals of the program.

[T]hat process also helped inform me about who's out there and what's going on, and who's doing what, and the people who called me back and followed through, as time consuming as it was, I felt like I got a much better understanding of the resources available in Austin, and when another RFQ came out and I submitted...I called back some of those people that had contacted me through the Good Faith Effort process and said, "Actually I'd like you to be on my team, you know I am really impressed with your work."

We agree with the program. We think that there probably is good coming out of the program.

2. Workplace Harassment

One White female engineer stated that she had been a victim of harassment on the job site.

The engineering team that I hired, the engineer that came to work under my supervision, you might say...he was harassing me...[H]e was not comfortable working for a woman.

[R]ecently, I went to the job site with my young intern who is male and taller than me. And everybody introduced themselves to him first instead of me...And another time, I went to a City of Austin project and I was referred to as “that lady.”

An Hispanic male contractor recounted the following incident.

My experience is we were working on this park for handicap. I’m handicapped. I’m a disabled veteran. I walk with braces on both of my legs. I was out there and this guy says—this white [guy]—”this is only for stupid handicapped people. Who cares? Just do it any way you want to.”

An Hispanic female contractor recounted the following incident.

A lot more women have gone into the construction business because I have got my friends into it. And then, being a woman, [the nonminority GC] called me a “woman of color”—which I had never heard. Never in my life had I ever considered myself called a woman of color. A Mexican, Latina, Native, anything, but I had never heard that term. That was the first time. They will try and intimidate and exploit you and he said you’re a woman of color. I said, “No, I’m not. I’m Mexican.” ... Then, he says “You’re too old to be doing this work.” Then I go, “But it’s already done and it passed code and it passed the inspection and it has rebar and we tied the rebar and it has the *malla*.” And then he goes, “See you don’t even know how to say the word.” But, it was good enough for me to say we we’re going to use the malla, meaning the screen.... So, they want to make you explain step by step how you do the work, intimidating you that you’re a woman, as he said, of color, and then, he says “You’re too old.” But yet, the work is done And now he says they don’t speak English or they don’t [speak it in] his style. They speak dialect, right. I go, “Well but, the work was done. We were here until all hours and we worked 24/7. But, it was done in about three or four days. This job would have been about 2 weeks, but we worked in 3 or 4 days.” So, now they throw your age. They throw you’re a colored woman all of a sudden. You’re not Mexican, now you’re a colored woman....When they don’t want to pay—I’m surprised they didn’t say the color of my eyes weren’t the right color, you know? But I never got paid. I got paid half.

3. Payment

There was uniform agreement across ethnic and gender groups that one of the most important issues was payment, by both the City and the prime contractor.

The nonminority primes expressed frustration with payment processes.

The City of Austin is slow pay. Is there something you can do about that...Everybody gets hurt.

Minority- and women-owned firms were particularly sensitive to the issue of payment and the negative impact delays in payment have upon their ability to succeed. Almost all of the minority owners stated that in general, they had great difficulties being paid by primes.

[T]he reason that I'm here...when I do a City construction job it takes me two months to get paid.

It's 90 days [and] as much as 120 days.

It's 90 days.

I have invoices up to six months.

If we could be treated like general contractors and get paid in 10 to 20 days, I would just do flips, but for some reason we're not treated equally and I don't get it.

Sometimes the prime contractors...they don't want to pay. And a city job is very comparable to private job, it is better, because they give you a time, schedule, but my experience is that some prime contractors, they don't want to pay.

[T]he job finished almost one and half years ago. Every time I e-mail... "Oh, we already sent the check to you." And I say, "No I haven't received it. Then I send it again like three or four times."

A nonminority female business owner indicated payments could be especially slow when working as a lower tier subcontractor or supplier on City projects.

Speed the process of payment from the subcontractors because, I mean, when it's—when you're dealing directly with the city, that's perfect, they can put you on the speed payment and it's good but when the city's paying the general and then the general—the subcontractor and then the subcontractor is the one getting my materials, I'm like the last person getting paid, so I'm getting paid like a month and a half later. So I don't know when I go back the chain and it's a big embarrassment to the contractor that hasn't paid me. I think he gets put on a bad spot or something so something with the payment to speed it up to, I don't know, maybe three weeks instead of 45 days; that would be awesome.

Many minority contractors suspect that the failure of some contractors to pay invoices timely was not accidental but deliberate.

It's because I'm a Mexican American, that's why they are not going to pay and they don't care whether I get paid.

I see payment issues. Payments being held up almost to the point it looks deliberate to put someone out of business where they can't make payroll.

When you talk about payment, a payment with a GC is a joke. If you want to go out of business quickly, you sign up with a GC, especially the ones that we know about, that is [the ones that] deliberately don't want to pay you at all.

...I have been around for a while, but I see young African Americans coming up here trying to start up a business and [getting] knocked out. You know, because the program is not, you know, ... they are letting the GCs run over them. You know, they are not paying them in a timely manner. So, that is an issue as well. You know, you can get hurt by this too, with this program. It affects people. I see it happening quite a bit.

If you're a minority, they're going to walk over you; especially those white contractors. They come from out of state, they come in here and they hire us, and with no intention of paying us. I've been before the city council ... and they just sit there and nod their heads and they say —"Oh, yeah, we're going to do something about it." ... You call SMBR. When I applied to work with the City, they told me, if you become a GC, if you don't pay your subs, we're going to stop your pay. Well, I went up there and I asked them "How come you don't stop this white man's pay?" It's because I'm a Mexican American, that's why they're not going to pay and they don't care whether I get paid. ... I've never gotten paid my money.

So, it's all—let me take this further. I don't get paid, guess what I'm buying material over here from the [minority-owned material supplier], he doesn't get paid. It's all downhill. My guys—I can barely make payroll. It not only just hurts me, it hurts a lot—it hurts the community.

4. Exclusion from Industry Networks

The perspective of many M/WBE firms was that the close knit nature of the construction industry intentionally or unintentionally contributes to the exclusion of M/WBE firms from informal networks.

What I want to say is that sometime discrimination is not intentional it is just outright discriminate. ... Sometimes—I grew up with this boy so I'm going to bring him in. I know his cousin and cousin and cousin and I'm going to bring him in. And so, that is the way that works. So, it is not necessarily, "I don't want Blacks or Hispanics to do it." It is just the way that the system is.

[On a project for Austin Energy] I was restoring the _____, the project manager...he was [an] Hispanic engineer, he liked to work we were doing, we were on schedule...as a matter of fact, I was pushing to move ahead of schedule...When he moved to another department...[A white Austin Energy engineer] came in. And ...pretty much said straight up to my subs, "He's not going to get [any more work on this project]." I still had [a lot of work left on my contract] that I was supposed to do [but the new engineer] said, I'm not going to get it and, by God, I did not get it. He brought in his guys, his good old boys.

So whatever the word is, nepotism, discrimination, racism, and bias, whatever word you want to use to take care of their crony friends that they always seem to want to work with.

It always went back to the good old boys network or who we had used previously. I don't have to scratch my head, think twice about this company. Sally down the hall told me this is the company I need to use.

It's the UT network.

And plus Texas is known for, especially in construction, you know, that they just use their friends, right, the good old boys.

But it's, [The City] Public Works [Department], they have some bad apples as project managers because this the good old boy [network]. They go out and do the Cotton Eyed Joe together and they drink they whiskey and beer together. ... So that's the kind of situation that you have here. [Minority] contractors are not going out doing the Cotton Eyed Joe with them or drinking beer. Maybe they should. I don't know. But that, that, it's a good old boy network. And it's hard to penetrate through that unless you just happen to be so good that they need you to get this project done and so they just, they'll go ahead and let you perform on that project.

It's discrimination. Let's call it what it is.

The significance of the network is also reflected in the fact that the majority construction contractors interviewed acknowledged that they selected their M/WBE subcontractors based on past performance and word of mouth.

If I know I have a bid out that's bidding concrete, and I've seen his work and it is not quality work, even if he is low bid, I won't use him.

Some nonminority construction contractors disagreed with the notion that existing relationships were a barrier to participation by M/WBE firms.

But, I think with Good Faith Efforts we're assumed—you know, we're not giving those up. We're—the good old boy network, I think, is still assumed. And in reality, I don't think that's what it is.

5. Applying for Commercial Loans

Many M/WBEs stated that they found it difficult to obtain working capital. In combination with a lack of access to family wealth and informal networks that support growing businesses, access to commercial credit becomes all the more critical.

I had a [line of credit] when I bought my company because I bought it out of bankruptcy and paid every bit of it. I signed every check, no one else signed it and they kept begging us—come to do this, come get more, come get another loan. And so, when we went to do it—I finally did...and the guy that was working with us went to Money Tree and so he left and the person ... working with us [said], "I am sending your papers, just get your husband to sign and we're good." I said, "My husband is not going to sign these papers because he doesn't have anything to do with my business."

But getting it was a very, very horrible process. It was just like, where's your husband? The bank, it's like, well, yes, yes, we're the owner of a business but he still needs to come and sign. ... [A]nd I'm a hundred percent [owner of my business].

[My only source of capital is] savings.

[B]anks are not user friendly.

I'll be transparent with you. I can't get a loan from a bank. I got a loan [instead] from BIG Austin, which is a micro-lender. Thank God that they are there for me.

I don't have lines of credit or loans or something like that, it's pretty much—what we have in the company is what we have to spend and what we have to float it ... I am careful on what jobs to take on.

I have an SBA Loan and that's the one that actually made me. In 2010 I was able to get it and it was the best thing ever. I mean I guess if I wouldn't have gotten it, I would have gone under.

If they have programs, I don't think they communicate it effectively enough with small business owners. Again, you talk about doing business with the City of Austin, and Travis County and AISD. If we can't get business with them then we can't pay off our lines, our loans...So, I think they need to do a better job of effectively servicing the small business with allowing them to know what type of funding they may be able to provide.

6. Applying for Surety Bonds and Commercial Insurance

Many firms reported difficulty obtaining surety bonds. The underwriting standards were so strict and required that the firm post cash or have sufficient assets to secure the bond that they could not qualify. They saw bonding as a barrier to growing and taking advantage of opportunities.

You are on your own for bonding.

I have a suggestion about construction...it should be made easier...to help the contractor get a bond.

[W]hen I started a business, I went through a list of all the banks, because it is really the banks that underwrites the bond in conjunction with the city and the underwriting parameters are a little bit easier. But a lot of those banks weren't aware of the program...It is a little bit out dated.

I think starting out, it is the chicken and the egg, because you are starting a new business and ...they are looking at your financial capacity. And starting out that is very difficult to do. And everybody also talks about how it is so easy to get bonding and it is not.

When I was operating with just my company, just me, myself, I wasn't able to afford insurance. And I had a small [City project with] maybe less than a \$1,000 fee, and I was required to have a million dollar policy for that. And I said I couldn't do it, so I ultimately lost that job.

I just want to say that as far as insuring goes, smaller firms are going to have the disadvantage that they can't absorb that cost and there is no way for them to recoup that.

[W]hen you buy fuel from a fuel terminal, they automatically deduct the state tax of 20 cents per gallon, but we still are required to place a bond with the City, [that] actually changed in October, but we are still required to place a bond for those back up taxes. But, we never do that, because it is already collected. And I actually did speak with someone at the City and they said this is basically—it doesn't help in any way. There is really—because the industry is set up in such a way that we have no way of holding those taxes. But they say, "Well, this is how it has been done and this is how we are going to keep doing it." So, that is just a waste of money in premiums per year which can be a pretty steep amount.

Among some nonminority firms there appeared to be an implicit assumption that no discrimination affecting M/WBEs was possible in the bonding or insurance industries.

But, from the engineer side, if you had a requirement that you have at least a minimum level of liability insurance and I would think that contractors could use bonding capacity in that same level, I think that gets a whole bunch of people out that are not—if you can't

qualify to get liability insurance through a private insurance company, then they're not somebody the City wants to have on their job anyway.

7. Obtaining Work on Public Sector Projects

a. Prime Contracts

Most M/WBEs expressed frustration with obtaining public sector prime contracts, and favored doing work in the public sector over private sector work, despite the additional red tape involved.

I think it is easier for a minority company to get work with the federal or city or the state rather than private. If it's private, they're very—they don't have to make selections based on low bid. They can go with buddies. They can go with reputation. They can go with other things.

My experience is that a lot of times we're asked to be to sub because we're DBE and we do the work for them and everything. But a lot of times...we'll go after a prime project as a prime in the field that we're in, we can't be the DBE...and they don't see us as a qualified team because we're the DBE.

I often believe that a minority company should be a prime.

[M]inority architects are getting repair jobs basically, and not prime projects.

Many firms were also discouraged from pursuing prime contracts because of concerns about the fairness of, and bureaucracy within, the City's contracting process.

Who am I supposed to talk to as a contractor when I see a contract that has been put out and I see that I can perform all duties and sub out one scope, the electrical, and then the contract is pulled? Six months later, the contract has been awarded to somebody and it wasn't even put out for bid. Come to find out, the department had issued out this no bid contract [and] is buddy-buddy with this guy with this company.

I do have a perception of some city staff [when] making selections for consultants for professional services, that they feel that the minority owned and women owned business are mostly suitable as a subconsultant and not as a prime consultant. So, in their selection process, they kind of—I don't know if it is subconsciously leaning towards the

nonminority, bigger companies. So, if you look at the City Council actions and look at the professional services award, you can see 90 percent of the award went to nonminority bigger firms. And maybe a very small percentage of the work—it seems like there is a ceiling that a minority or women owned business can only grow to—I mean, they look at it as, “Well, you guys look for work. You can be subconsultant to _____ and _____ or _____. I mean, you get five percent or whatever, ten percent, and that is good enough for you guys.”

When I went and approached them, [Austin Energy] told me that I had had to have aerial bucket trucks. Okay? And I had to have—if I was to do half the City, which would be 9 million or so, I had to have 20 bucket units. Now, the bucket units require a higher commercial license and are almost 5 times more expensive than a regular chipper truck. Then they tell me all of this and I don’t meet that criteria and then all of a sudden they hire _____ ... and I haven’t seen a bucket truck to this date.

You know, I won a number of contracts from the City of Austin but I stopped after a while because of an incident where I had the highest points, they awarded it to somebody whose firm had a relationship with the City. I mean, it was blatant.

I had bid on a city project as the prime and I got it. I wanted a subcontractor on the project for a variety of reasons. ... The RFP said that we have determined no goals are necessary for this, you don’t have to do a Good Faith Effort, unless you are going to subcontract. So because I wanted a subcontractor on there to fill a gap because I am a small firm I have to go through the whole Good Faith Effort, even though I got zero points for having any minority or any other firm on there, and I had to go through the whole process...I had to go through that when there were no goals on the project.

b. Subcontracts

Although M/WBEs reported that it is easier to obtain subcontracts than prime contracts on public projects, there was widespread perception that M/WBEs must be very careful of the GCs they choose to do business with.

I started as a subcontractor and [now] I’m a general contractor. I started as a sub and went a lot...talking about bid shopping, somebody using your numbers, not be called back ...they are not being upfront with you. They are not giving you back information. ... I found these things out very quickly. And what I did was I just stopped bidding to certain GCs.

I've called some general contractors to find out where exactly was my bid? And they'll say you weren't below us. You didn't meet it. Well can I see what the other bid is? They just said no. I have no way of verifying if what they are telling me is correct. I'm completely in the dark.

Some minority contractors reported that they suspect that prime contractors set them up for failure by imposing unreasonable time deadlines.

Then one of these prime plumbers, stops the progress on the project for two weeks. One wall on the bedroom, he said it's little for me, it's a little bit ... they come back, "Hey you've got to get it done in three days." There is no way to get it done in three days. They stopped the progress for two weeks...I see the discrimination....

M/WBE firms uniformly complained about being listed in the GC's proposed schedule of subcontractors but not being used or being dropped after the GC won the bid.

I will share my experience...And [the GC] recently bid on two City of Austin jobs and asked us to be a part. They called us and asked us to be a part of that bid. They won the bid. And as soon as they had won the bid, they took us off the project.

The problem that I see that more uniquely happens to African Americans in being named on the compliance plan. And then, at the point of the job starting, not being utilized.

You know, if the [GC] gets to where he is not making any money, they are going to start going down feeding on the subs that are leftover, you know, trying to get their balance sheet back right. But, I have had projects and say it is a 24 month project and I am last. So, 23 months go by. I am driving down the street, my scope is gone.

On the other hand, some of the M/WBEs had cultivated successful relationships because of the high quality of their work and services.

And so there are certain general contractors that I have been fortunate to develop a relationship with that have been great from my standpoint...And so, it is because of those generals, not necessarily the program.

8. Obtaining Work on Private Sector or "Non-Goals" Projects

M/WBEs providing construction services uniformly continue to find private sector prime contract work (other than small residential and commercial projects) very difficult to obtain.

Most M/WBEs, particularly those owned by African Americans and Hispanics, are often limited to public sector projects. Minority firms in particular reported that general contractors who use

them successfully and repeatedly on projects with race and gender conscious goals rarely or never involve them in private work.

I think for an example, you know, doing a project with the airport and I guess a portion of it was City-managed relocate or what have you. And [we] completed the job, did a successful job and the same general contractor got plan B of the project which is private funded. You know, no call. No, “Hey come over.” ... And I have a good relationship with this company, but the first minute they determined that they don’t have to make goals or include us, we don’t get work.

Another comment too is, so a lot of us do public work. Some of us also do private work. And, I guess, a question for me would be, for private work, contractors that bid city work, do they use African American contractors when there are not goals, when it is not a government project? And I think that would be telling also because why are they trying to meet goals and have Good Faith Effort[s] for government projects? Because they have to. What are they doing with private sector jobs where there is not a requirement for that? I mean, do you all have success in bidding _____ and some of these other people?

Private? No. No. It is rare.

Some of these big guys, they wouldn’t do business with us at the City if they didn’t have this program. Because you could tell that when they do private sector work. They don’t call any of our contractors to work with them on private sector work.

In a few instances, prime contractors who have developed strong working relationships with M/WBE firms expressed a contrary opinion that they will solicit them to work on private projects.

And I’ll tell you, as many issues as I have with the [City’s M/WBE] Program, I’ve also had some good experiences where I’ve met subs and gotten in relationships now with subs that I wouldn’t have ever come across and now I use on a regular basis outside of these programs [on private sector work].

D. Conclusion

Consistent with other evidence reported in this Study, our interview information strongly suggests that M/WBEs continue to face discriminatory barriers to full and fair participation in both public and private sector contracts in the Austin market area. This evidence includes negative perceptions of M/WBE competence and qualifications; double standards in performance; abuses by primes of the payment process and the compliance process; discrimination in access to commercial loans, surety bonds and commercial insurance; difficulties in receiving fair treatment in obtaining public sector prime contracts and subcontracts; and exclusion from significant private sector opportunities to perform as either

prime contractors or as subcontractors. While not necessarily definitive proof, standing alone, that the City of Austin has a compelling interest in implementing race- and gender-conscious remedies for these barriers, the results of the surveys and the personal interviews are the types of evidence that the courts have found to be highly probative in deciding whether the City of Austin has been and/or continues to be a passive participant in a discriminatory market area, particularly when considered in conjunction with the numerous pieces of statistical evidence assembled and presented throughout this Study.

VIII. The City of Austin M/WBE Program: Overview and Feedback Interviews

This Chapter reviews Austin’s current contracting policies and procedures for Construction, Professional Services, Nonprofessional services and Commodities through its M/WBE Program, followed by a summary of business owner experiences with the Program and policies and procedures.

A. Overview

Austin’s Minority-Owned and Women-Owned Business Enterprise Procurement Program adopts race- and gender-conscious goals to provide equal opportunity to all contractors, redress discrimination in the City’s marketplace and public contracting and to encourage the participation of M/WBEs in all phases of the City’s procurement activities. Austin’s policies under this Program are governed by Chapter 2-9A-D of the Austin City Code, Minority and Women’s Business Enterprises Procurement Program (“M/WBE ordinance”).

Austin’s M/WBE program was originally established in 1987 and has been administered by the City since that date. The ordinance provides that it is the “policy of the City to provide equal opportunities to all contractors and to redress discrimination found in the City’s marketplace and in public contracting against minority and women owned business enterprises.”¹⁸² The current ordinance, as amended by Ord. 20060608, is based upon findings of the Austin City Council. The City Council relied upon the work of the Economic Development Council to enact the first iteration of the ordinance; and subsequent ordinances have relied upon the 1993 Disparity Study, 2003 Disparity Study,¹⁸³ and 2008 Disparity Study¹⁸⁴ and all other relevant facts. The City specifically found that:

- There are identifiable adverse and statistically significant disparities in business formations and business owner earnings for all M/WBEs;¹⁸⁵
- There are identifiable adverse and statistically significant disparities in access to capital for all M/WBEs in the City’s marketplace;¹⁸⁶
- The evidence continues to indicate that absent the programs authorized under this ordinance, MBEs and WBEs would be underutilized on City contracts relative to their availability;¹⁸⁷ and

¹⁸² Austin, Tex. Code § 2-9A-2.

¹⁸³ *City of Austin Minority Business Enterprise Disparity Study*, MGT of America Inc., June 14, 2003.

¹⁸⁴ *Race, Sex, and Business Enterprise, Evidence for City of Austin*, NERA Economic Consulting, May 8, 2008 (“2008 Disparity Study”).

¹⁸⁵ Austin, Tex. Code § 2-9A-1(R) (1).

¹⁸⁶ Id. § 2-9A-1(R) (2).

¹⁸⁷ Id. § 2-9A-1(R) (3).

- Austin’s program continues to be narrowly tailored.¹⁸⁸

The purpose and objective of the ordinance is to achieve the following:

- To ensure that the City is not a passive participant in a discriminatory marketplace;¹⁸⁹
- To ensure that the program is narrowly tailored;¹⁹⁰
- To provide opportunities for MBEs and WBEs to broaden and enhance their capabilities to do business with the City in the area of construction;¹⁹¹
- To provide opportunities for MBEs and WBEs to serve as contractors and subcontractors for the supply of goods and services to the City in the area of construction;¹⁹² and
- To administer this program in a manner consistent with applicable federal and state law.¹⁹³

All locally-funded contracts awarded by the City are included in the scope of the ordinance, including Construction, Professional Services, Nonprofessional Services and Commodities contracts. The ordinance expires, or “sunsets,” at the close of business on December 31, 2015, unless the City Council reauthorizes it.¹⁹⁴ The scope of the City’s affirmative action contracting program is enhanced by also including race-neutral measures to facilitate the participation of businesses in City contracts.¹⁹⁵ For example, SMBR collaborates with the Minority Trade Association Alliance and the construction advocacy organizations on certification training, technical workshops and outreach of upcoming City solicitations.

The Small and Minority Business Resource Department (“SMBR” or “Department”) is created by the ordinance as a separate and independent department.¹⁹⁶ The M/WBE ordinance mandates that the Department will be administered by the Director, a direct report to the City Manager.¹⁹⁷ SMBR is also responsible for administering and implementing the Disadvantaged Business Enterprise (“DBE”) and Airport Concessions Disadvantaged Business (“ACDBE”) Program for federally-assisted contracts or as a condition of receiving federal Airport Improvement Project

¹⁸⁸ Id. § 2-9A-1(R) (4).

¹⁸⁹ Id. § 2-9A-2(1).

¹⁹⁰ Id. § 2-9A-2(2).

¹⁹¹ Id. § 2-9A-2(3).

¹⁹² Id. § 2-9A-2(4).

¹⁹³ Id. § 2-9A-2(5).

¹⁹⁴ Id. § 2-9A-26.

¹⁹⁵ Id. § 2-9A-5; § 2-9B-5; § 2-9C-5; § 2-9D-5.

¹⁹⁶ Id. § 2-9A-10; § 2-9B-10; § 2-9C-10; § 2-9D-10.

¹⁹⁷ Id. § 2-9A-10; § 2-9B-10; § 2-9C-10; § 2-9D-10.

funds for the City's airport operations. The Department is currently staffed with 23 staff positions with a total of 26 positions, including a Director, Assistant Director, and three division managers for Compliance, Certification and Resources.

The Compliance Division is responsible for reviewing proposed solicitations and determining whether a goal should be established for that solicitation. The Compliance Division is also responsible for monitoring and tracking the contractor's compliance with the M/WBE and ACDBE goal commitments. The Certification Division is responsible for certifying firms that are eligible to be certified as an MBE or WBE. The Certification Division is staffed by four Business Development Counselors and each counselor currently averages 40 to 50 certification files, including original applications and certification renewals. The Resource Division is responsible for providing support services for the Department and manages the plan room, the bonding assistance program, and the provision of various informational workshops.

The M/WBE ordinance outlines in detail the Department's specific duties, which include:

- Certification of MBEs, WBEs, DBEs and ACDBEs (hereafter, unless otherwise specified "M/WBEs");
- Reporting the availability of certified M/WBEs;
- Assuring that M/WBEs are informed of City contracting opportunities;
- Reviewing complaints concerning the Program and reporting violations of the ordinance;
- Providing information to M/WBEs regarding City procurement practices and bidding on City contracts;
- Monitoring contracts to ensure prompt payments to M/WBEs;
- Formulating rules and regulations to implement the Program;
- Monitoring contractor compliance with goals or Good Faith Efforts ("GFE") and rendering GFE determinations; and
- Establishing project participation goals and subgoals.¹⁹⁸

Under the ordinance, the City of Austin has established annual participation goals for MWBEs on city contracts.¹⁹⁹ The City's current participation goals for Construction, Professional Services, Nonprofessional Services and Commodities are as follows:

¹⁹⁸ Id. § 2-9A-10; § 2-9B-10; § 2-9C-10; § 2-9D-10.

¹⁹⁹ Id. § 2-9A-3; § 2-9B-3; § 2-9C-3; § 2-9D-3.

Construction Participation Goals²⁰⁰

African-American Owned Business Enterprises	1.7%
Hispanic-Owned Business Enterprises	9.7%
Asian-American and Native American Owned Business Enterprises	2.3%
Minority-Owned Business Enterprises	13.7%
Women-Owned Business Enterprises	13.8%

Professional Services Participation Goals²⁰¹

African-American Owned Business Enterprises	1.9%
Hispanic-Owned Business Enterprises	9.0%
Asian-American and Native American Owned Business Enterprises	4.9%
Minority-Owned Business Enterprises	15.8%
Women-Owned Business Enterprises	15.8%

Nonprofessional Services Participation Goals²⁰²

African-American Owned Business Enterprises	2.5%
Hispanic-Owned Business Enterprises	9.9%
Asian-American and Native American Owned Business Enterprises	1.7%
Minority-Owned Business Enterprises	14.1%
Women-Owned Business Enterprises	15.0%

Commodities Procurement Participation Goals²⁰³

African-American Owned Business Enterprises	0.3%
Hispanic-Owned Business Enterprises	2.5%
Asian-American and Native American Owned Business Enterprises	0.7%
Minority-Owned Business Enterprises	3.5%
Women-Owned Business Enterprises	6.2%

The Purchasing Office of the Financial and Administrative Services and the Public Works Departments are also charged with duties under the Program.²⁰⁴ The duties and responsibilities of the Purchasing Office are as follows:

²⁰⁰ Id. § 2-9A-3.

²⁰¹ Id. § 2-9B-3.

²⁰² Id. § 2-9C-3.

²⁰³ Id. § 2-9D-3.

- Maintain records of awards and payments to M/WBEs;
- Assist in the record keeping by obtaining monthly reports from contracting departments;
- Compiling an annual report of fiscal year M/WBE and DBE participation; and
- Compiling and reporting annually to the City Council the utilization of M/WBEs for that year based upon contract awards.²⁰⁵

The duties and responsibilities of the Public Works Department are also included in the Ordinance and include:

- Assist Director in setting contract specific goals and subgoals;
- Assist in the identification of available M/WBEs and DBEs;
- Gathering and maintaining subcontractor data; and
- Managing contracts to ensure contract compliance in the utilization of M/WBEs.²⁰⁶

B. Outreach to Minority- and Women-Owned and Other Small Businesses

SMBR participates in many outreach activities to minority- and women-owned and other small firms. These include:

- Information sessions on upcoming contracting opportunities with the City and other governments;
- Participation on panels and workshops on the MWBE program;
- Assistance with business development; and
- Networking events to introduce M/WBEs to prime contractors and to each other.

SMBR also collaborates with the Minority Trade Association Alliance and the construction advocacy organizations on outreach activities such as workshops and information on upcoming opportunities. SMBR has contracts with the Asian, Black and Hispanic contractor's Association to assist in outreach and provide support services programs designed to assist with the firm's business development.

²⁰⁴ Id. § 2-9A-11-12; § 2-9B-11-12; § 2-9C-11-12; § 2-9D-11-12.

²⁰⁵ Id. § 2-9A-11; § 2-9B-11; § 2-9C-11; § 2-9D-11.

²⁰⁶ Id. § 2-9A-12; § 2-9B-12; § 2-9C-12; § 2-9D-12.

C. Program Elements

1. Certification of Minority- and Women-owned Businesses

The Office is solely responsible for certifying MBEs and WBEs and only a firm that is owned by a socially and economically disadvantaged person may be certified as a MBE/WBE.²⁰⁷ The City of Austin is a member of the Texas Unified Certification Program and will accept ACDBE and DBE certifications approved by the program. There are approximately 800 to 1000 firms that are certified by the City of Austin and the vast majority of the firms seek re-certifications annually. The application form is simple to complete and available online. The average processing time is 60 days for a new certification application and a similar time period for a renewal certification. The renewal certification process is as rigorous as the initial certification and also takes significant time to complete because the Office will conduct a comprehensive review of the relevant financial and tax records for the previous year's certification period. The MWBE certification is good for a three year period and must be renewed upon expiration of the original term. The MWBE firm is certified in specific commodity codes during the certification process.

The Office maintains a Certified Vendor List for MBE and WBE firms. A searchable version of the directory can be found online at <http://www.austintexas.gov/smbr/vendors/certvendor.cfm>.

a. Firm Eligibility

i. Eligible Groups

A business enterprise “(1) that is owned, operated and controlled by one or more minority group members or female owners who have at least 51% ownership; (2) in which the minority group members or female owner have operational and managerial control, interest in capital, and earnings commensurate with their percentage of ownership; and (3) that is located in the Austin City Market Area” is eligible for certification as an MBE or WBE.²⁰⁸ “Minority group member” is defined as a member of a minority group, such as African American, Hispanic American, Asian American, or Native American, or other groups found to be Socially and Economically Disadvantaged.²⁰⁹

ii. Business Location

The City of Austin Market Area (“AUSMA”) is defined as Travis, Williamson, Hays, Bastrop and Caldwell Counties.²¹⁰ As was demonstrated in Chapter II, the revised geographic market area, for all procurement activities, is established to be Travis, Williamson, Hays, Bastrop and Caldwell Counties.²¹¹

²⁰⁷ Id. § 2-9A-15(d); § 2-9B-15(d); § 2-9C-15(d); § 2-9D-15(d).

²⁰⁸ Id. § 2-9A-4(31) (47); § 2-9B-4(31) (47); § 2-9C-4(31) (47); § 2-9D-4(31) (47).

²⁰⁹ Id. § 2-9A-4(32); § 2-9B-4(32); § 2-9C-4(32); § 2-9D-4(32).

²¹⁰ Id. § 2-9A-4(4); § 2-9B-4(4); § 2-9C-4(4); § 2-9D-4(4).

²¹¹ See Table 2.5.

iii. Business Size

The ordinance provides that the M/WBE firms may not exceed the size standards established by the United States Small Business Administration.²¹²

iv. Business General Criteria

In addition to being an independent, operating business, the applicant must have been doing business in Texas at least three months prior to the certification application.²¹³

The applicant must be controlled by a minority or female owner. Ownership and control must be real and substantial, and indicated by the customary incidents of ownership, as demonstrated by the substance of ownership and operating arrangements. The owner must have the power to direct or cause the direction of the management and policies of the applicant and to make day-to-day decisions, as well as decisions on management, policy and operations. The business must not be subject to any formal or informal restrictions that limit the customary discretion of the owner. There may not be any restriction that prevents the minority or female owner from making business decisions without the cooperation or vote of any owner who is not a minority or female.²¹⁴

b. Procedure for Certification Appeals

A Firm that is subject to an adverse or potentially adverse certification decision does have the right to appeal the decision. A party must submit a written notice to appeal within seven days of the Director's written notice of certification denial and the failure to timely file the notice waives all rights to the appeal or protest. The Director will review the Firm's written appeal and set a date for the informal hearing, if in the Director's view the grounds for the appeal are sufficient.²¹⁵

The Director shall review the information and shall communicate a decision to the Firm within 10 calendar days of the hearing. The Director's decision is not final and may be appealed to the Purchasing Officer within four calendar days of receipt of the decision. A non-compliance adverse decision is appealable immediately to the Purchasing Office or Contract Award Authority.²¹⁶ The City has appointed hearing examiners to consider the firm's appeal of an adverse decision.

²¹² Austin, Tex. Code § 2-9A-4(31) (d) (47) (d); § 2-9B-4(31) (d) (47) (d). § 2-9C-4(31) (d) & (47) (d). § 2-9D-4(31) (d) (47) (d).

²¹³ Id. § 2-9A-4(31)(e)(47)(e); § 2-9B-4(31)(e)(47)(e); § 2-9C-4(31)(e)(47)(e); § 2-9D-4(31)(e)(47)(e).

²¹⁴ Id. § 2-9A-4(E); § 2-9B-4(E); § 2-9C-4(E); § 2-9D-4(E).

²¹⁵ Id. § 2-9A-16(A); § 2-9B-16(A); § 2-9C-16(A); § 2-9D-16(A).

²¹⁶ Id. § 2-9A-16(B) (C); § 2-9B-16(B) (C); § 2-9C-16(B) (C); § 2-9D-16(B) (C).

A Firm that does not timely prosecute an appeal or protest a decertification decision or is unsuccessful on appeal, may not reapply for certification until 180 days after the denial or decertification decision.²¹⁷

c. Challenge to Certification

A third party may challenge a firm's certification and present evidence that a certified M/WBE firm does not meet the eligibility requirements. The challenge shall be in writing to the Director, under oath, and shall include all of the information that forms the basis of the challenge. The Director shall give written notice to the challenged party of the issue regarding the Firm's eligibility for certification. Further, the Director may also require the challenged firm to submit additional documents to facilitate the evaluation of the eligibility of the Firm.²¹⁸

The challenge process follows the same procedures outlined in the above discussion of the Procedure for Appealing and Protesting Adverse Decision.²¹⁹

2. Program Review

The City Council shall receive an annual report from the City Manager detailing the City's M/WBE performance. The annual report shall contain a department by department utilization of MBEs and WBEs for the preceding year. The City Council shall review the report and revise the M/WBE Program as necessary in light of the evidence.²²⁰

3. Setting Contract Participation Goals

The Director of SMBR is responsible for setting contract participation goals on each specific contract in consultation with the User Department. In setting goals, the Office considers a number of factors including the availability of at least three certified MBEs and WBEs for the various industry sectors; the level of past utilization on past City contracts; and any other relevant factors. In setting individual contract participation goals, the Director shall rely on the Finance and Administrative Services information system.²²¹

a. Counting M/WBE Participation Towards Contract Participation Goals

For a firm's participation to be counted toward the goal, only the value of the work actually performed by the M/WBE will be counted toward the goal.²²² An M/WBE prime may count their own participation toward the goal.

²¹⁷ Id. § 2-9A-16(D); § 2-9B-16(D); § 2-9C-16(D); § 2-9D-16(D).

²¹⁸ Id. § 2-9A-17; § 2-9B-17; § 2-9C-17; § 2-9D-17.

²¹⁹ Id.

²²⁰ Id. § 2-9A-18; § 2-9B-18; § 2-9C-18; § 2-9D-18.

²²¹ Id. § 2-9A-19; § 2-9B-19; § 2-9C-19; § 2-9D-19.

²²² Id. § 2-9A-20(A); § 2-9B-20(A); § 2-9C-20(A); § 2-9D-20(A).

A bidder may count towards a contract goal the value of a subcontract with an MBE or WBE including the cost of supplies and materials. The bidder must choose the goal to which the contract value is applied if the firm is certified as an MBE and a WBE and the bidder may not double count the participation of one firm between the two goals.²²³

The entire amount of fees and commissions charged by an M/WBE for bona fide services shall be counted provided that the fees are reasonable and not excessive.²²⁴

If the M/WBE firm is a participant in a joint venture, the distinct and clearly defined portion of the work performed by the certified firm may be counted toward the goal. The certified firm must have an interest in the control, management and operations of the joint venture commensurate with its ownership interest and be responsible for a distinct, clearly defined portion of the work equal to its share in the joint venture.²²⁵

Only the expenditures of an MBE or WBE that performs a commercially useful function shall be counted.²²⁶ The ordinance defines a commercially useful function to mean that the M/WBE firm must perform a distinct portion of the work for which the firm has the skill, expertise and actual responsibility to perform, manage and supervise. In making the “commercially useful function” determination, the City will evaluate the amount of work subcontracted, normal industry practices and other relevant factors to determine whether the certified firm is performing a commercially useful function.²²⁷

A bidder may count 100 percent of its expenditures towards the goal to a certified firm supplier who is also the manufacturer or regular dealer.²²⁸ If the M/WBE is neither a manufacturer nor a regular dealer, a bidder may count only the fees or commissions charged, and then only if the fees are reasonable and consistent with industry practices.²²⁹

Only actual dollars paid to the M/WBE will be counted toward the goal and the M/WBE is certified during the term of the contract.²³⁰

b. Evaluating Bidders' Compliance

The bid conditions and request for proposals require the bidder to include in its bid submission a completed Compliance Plan. Notarized Letters of Intent from M/WBEs utilized on the project must be submitted within three business days after notice as apparent low bidder or successful

²²³ Id.

²²⁴ Id.

²²⁵ Id. § 2-9A-20(B); § 2-9B-20(B); § 2-9C-20(B); § 2-9D-20(B).

²²⁶ Id. § 2-9A-20(C); § 2-9B-20(C); § 2-9C-20(C); § 2-9D-20(C).

²²⁷ Id. § 2-9A-4(12); § 2-9B-4(12); § 2-9C-4(12); § 2-9D-4(12).

²²⁸ Id. § 2-9A-20(E); § 2-9B-20(E); § 2-9C-20(E); § 2-9D-20(E).

²²⁹ Id.

²³⁰ Id.

proposer. A bid that fails to include the Compliance Plan results in rejection of the bid as nonresponsive.²³¹

If a bidder is unable to comply with a contract goal, the bidder may still be eligible for award of the contract if they made a Good Faith Effort to do so. SMBR is responsible for evaluating the Compliance Plan and advising the Contracting Authority if the bidder met the goal or made a Good Faith Effort. The bidder is required to submit the Good Faith Efforts documentation with the submission of the bid or proposal.

If the Compliance Plan is denied on the grounds that the bidder did not meet the Good Faith Effort requirement, the bidder/proposer may appeal following the protest procedures set forth in the City of Austin's Purchasing Office Solicitation Instructions.²³²

In considering the efforts of a bidder, there are several steps that a bidder must take in order to meet the minimum requirements to satisfy the Good Faith Efforts standard. The specific requirements SMBR will consider in making the Good Faith Efforts determination are outlined in the ordinance.²³³ In summary, SMBR will review the efforts of the bidder to determine if the steps the bidder made are reasonable if the bidder is actively trying to obtain M/WBE participation. For example, the bidder must send notices using two verifiable methods seven days prior to the bid and include in the notice relevant information such as the contract information and due date for responding. Other GFE factors considered by SMBR include whether the bidder followed up with interested M/WBE firms, negotiated in good faith and sought the assistance of trade associations to identify potential M/WBE firms.²³⁴

Additionally, the Ordinance provides significant flexibility for firms that wish to apply more creative approaches to meeting Good Faith Efforts requirements:

“The following factors may also be considered by SMBR in determining that a Bidder/Proposer has made Good Faith Efforts. These factors are not intended to be a mandatory checklist, nor are they intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases: (1) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the City or Contractor; (2) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.”²³⁵

4. Third Party Contracts

The City of Austin is authorized to make grants or tax incentives to promote local economic development and stimulate business and commercial activity in Austin. The Third-party

²³¹ City of Austin Minority-Owned and Women Owned Business Enterprise Procurement Program Rules, Section 9.1.3, incorporates the Good Faith Efforts requirement outlined in City Code §§ 2-9A-21; 2-9B-21; 2-9C-21 or 2-9D-21.

²³² City of Austin Minority-Owned and Women Owned Business Enterprise Procurement Program Rules, Procedures for Protesting Denial of Compliance Plan for Lack of Good Faith, Section 9.6.

²³³ Austin, Tex. Code §§ 2-9A-21, 2-9B-21, 2-9C-21 and 2-9D-21.

²³⁴ Id.

²³⁵ Id., emphasis added.

development projects with private developers are the responsibility of the City's Economic Development Department. SMBR is responsible for working with the City of Austin's Economic Development Department on Third-Party contracts. The City of Austin will enter into an Economic Development Agreement with a Company or Developer. The corporate signatory to the agreement is encouraged to use commercially reasonable efforts to utilize M/WBE firms in their private sector development projects and will receive a tax incentive or other negotiated City incentives for their compliance.

The Company or Developer is responsible for reporting to SMBR monthly reports tracking the utilization on a percentage basis the M/WBE firms in the design and construction of the project. SMBR does not have the authority to impose or recommend sanctions on third-party contractors for non-compliance with the City's M/WBE program.²³⁶

5. Airport Concessions and Disadvantaged Business Enterprise Programs

As discussed briefly above, SMBR is also responsible for the administration and implementation of the federal ACDBE Program for federally-assisted contracts. SMBR's Certification Division certifies businesses that are owned and operated by both socially and economically disadvantaged individuals as DBE and ACDBE firms. SMBR Assistant Director is the DBE Liaison Officer for the City's DBE Program, and for FY 2014-2016, the City of Austin has proposed a 9.60 percent DBE goal for airport construction projects.²³⁷ The Compliance Division has dedicated a Business Development Counselor to the administration of the ACDBE Program. The DBE program is outlined in 49 CFR Part 26 and covers all construction and professional services contracts and subcontracts, federally-assisted contracts or grants from the Federal Aviation Administration.

SMBR's Assistant Director is also the designated ACDBE Liaison Officer for the City's ACDBE program. For Fiscal years 2015-2017, the proposed goals for the City of Austin's ACDBE program are 14.72 percent for Non-Car Rental Concessions and 2.43 percent for Car Rental Concessions.²³⁸ The ACDBE program is outlined in 49 CFR Part 23 and governs airport concessions and concession-related contracts at the City of Austin Bergstrom International Airport.²³⁹

The City of Austin M/WBE program is modeled after the ACDBE Program and the architecture and administration of the respective programs are similar.

²³⁶ Chapter 380 of the Texas Local Government Code.

²³⁷ City of Austin, DBE Program—Attachment 5-Overall DBE Three-year Goal Methodology.

²³⁸ City of Austin ACDBE Program—Attachment 5 & 6—ACDBE Goal Calculation.

²³⁹ City of Austin ACDBE Program—Airport Concessions DBE Program Effective April 2015.

6. Post Award Contract Compliance

a. Contract Reporting and Monitoring

Construction Contractors must present a work schedule at the preconstruction meeting that provides the details of the M/WBE subcontractors on the project. Professional Service and Non-Professional service providers must also provide a written schedule outlining the M/WBE participation.²⁴⁰

The Director is responsible for monitoring the participation on the respective contracts and has access to all contract related documents.²⁴¹ All Contractors and Consultants are required to provide payment information for subcontractors and sub-consultants with each request for payment submitted to the City. On goals contracts, the contractor or consultant will submit with the invoice a SubK expenditure report. The payment information is tracked internally and entered manually into the eCapri software system which captures expenditures, project deadlines and percentage complete. A separate program, AIMS, tracks the financial information captured in the invoices.

Prior to Contract closeout, the Director shall evaluate the Contractor's compliance with the contracted project goals. The Director shall determine and report in writing if the contract goals were met or not met and, if necessary, provide an explanation for the failure to meet the contract goal. The Director shall render a written Adverse Decision if the contractor has not met the goal and release the decision to the appropriate parties on the contract.²⁴²

The Director's adverse decision is appealable to the Purchasing Office or Contract Awarding Authority within 14 calendar days from the date of the findings. A hearing shall be held within 15 calendar days and written findings and recommendations to resolve the matter issued within 15 days after the close of the hearing.²⁴³

b. Subcontractor Substitutions

If a contractor is unable to meet the contract goal by utilizing the MWBE firms specified in the Compliance Plan, the contractor must submit a written request to obtain approval for the change or addition to the Compliance Plan. The contractor must send a certified letter to the subcontractor or sub-consultant outlining the basis for the requested change and give the party an opportunity to resolve the issue. The contractor is obligated to make a Good Faith Effort to resolve the problem and must immediately request a meeting with the subcontractor. If the contractor is unable to resolve the problem and elects to pursue substitution, the prime contractor

²⁴⁰ Austin, Tex., Code § 2-9A-22; § 2-9B-22; § 2-9C-22; § 2-9D-22.

²⁴¹ Id. § 2-9A-22(C)(D); § 2-9B-22(C)(D); § 2-9C-22(C)(D); § 2-9D-22(C)(D).

²⁴² Id. § 2-9A-22(E); § 2-9B-22(E); § 2-9C-22(E); § 2-9D-22(E).

²⁴³ Id. § 2-9A-22(F); § 2-9B-22(F); § 2-9C-22(F); § 2-9D-22(F).

or consultant must submit a sworn statement with the Request for Change confirming that a meeting has taken place.²⁴⁴

c. Payment

The contractors and consultant payments to subcontractors and sub-consultants is tracked by the Office through the SubK expenditure reports. SMBR does not independently verify the payments made by primes to subcontractors and sub-consultants.

7. Post Award Changes to Scope of Work

Change Orders to the scope of work by the contract Awarding Authority are required to be documented at the time of the change. Any addition or decrease in the amount of work resulting from the Change Order shall be noted on the Change Order and a copy of the Change Order shall be forwarded to SMBR Director.²⁴⁵ The documentation should detail the reason for the change and the impact of the change on the contract goals. For Construction contracts, the ordinance distinguishes between change orders that expand the trades originally contemplated by the project and those change orders that do not alter the original project trades. In the first category of change orders, the Contractor is required to meet the goals or make a Good Faith Effort to meet the goal for the additional scope. In the second category, the Contractor is required to achieve the goal using the original team of subcontractors, sub-consultants, and suppliers.²⁴⁶ For professional and nonprofessional services contracts, the service provider must follow the same process outlined for construction contracts.²⁴⁷

If the Change Order results in the deletion of a scope of work by the MBE or WBE, the prime and M/WBE subcontractors shall be notified and SMBR shall recalculate the goal.²⁴⁸

8. Contract Closeout

Within 7 business days of receipt of contract close out documents, the Director reviews the payment history related to the M/WBE firms' participation. The Director notifies the Contracting Authority that the contractor/consultant has paid all uncontested amounts to the subcontractor/sub-consultant. The Director may request additional time to complete the review.

If the Director determines that the M/WBE commitments were satisfied, final payment can be made, and the contract closed in accordance with City's procedures. If the Director determines that the contractor/consultant has not satisfied the terms of the contract, the Director shall provide a written statement of the determination with an explanation of the determination to the

²⁴⁴ City of Austin Minority-Owned and Women-Owned Business Enterprise Procurement Program Rules, Requests for Changes in Compliance Plans, Section 11.1.

²⁴⁵ City of Austin Minority-Owned and Women-Owned Business Enterprise Procurement Program Rules, Change Orders, Section 11.3.

²⁴⁶ Austin, Tex., Code § 2-9A-24; § 2-9B-24; § 2-9C-24; § 2-9D-24.

²⁴⁷ Id. § 2-9A-24(C); § 2-9B-24 (C); § 2-9C-24(C); § 2-9D-24(C).

²⁴⁸ City of Austin Minority-Owned and Women-Owned Business Enterprise Procurement Program Rules, Change Orders, Section 11.3.

contractor/consultant. The Director is also to recommend sanctions and the procedures to appeal the determination.²⁴⁹

9. Sanctions

The ordinance outlines unlawful conduct that may result in sanctions and the sanctions which may be imposed for a violation of the M/WBE chapter. Sanctions may be imposed for:

- Providing false or misleading information in the certification, recertification or decertification process;
- Providing false or misleading information in the bid or solicitation process;
- Unauthorized substitution of M/WBE subcontractors;
- Bid shopping;
- Contract changes without an approved Request for Change; or
- Committing a violation of this chapter.²⁵⁰

When the Director or any City official identifies a violation of the M/WBE ordinance, the matter will be referred to the Purchasing Office in consultation with the Law Department for evaluation of the appropriate sanctions. The range of sanctions include decertification, criminal sanctions and a fixed sum as a penalty for an unexcused failure to meet the goal or sub-goal.

Although very few firms have been subject to sanctions for non-compliance, the Minority-Owned and Women-Owned Business Enterprise Procurement Program Rules establish a progressive sanctions schedule for non-compliance:

- 1st Violation: Probation for a period of up to 6 months;
- 2nd Violation: Suspension for a period of 24 months; and
- 3rd Violation: Debarment for a period of 5 years.

In addition to unlawful conduct outlined above at the prime level, the ordinance also imposes similar sanctions on a bidder, proposer, subcontractor or contractor for violations of this chapter. A firm may be barred, suspended or deemed non-responsive for:

²⁴⁹ Except in the case of Third-party contracts. See fn. 236.

²⁵⁰ Austin, Tex., Code § 2-9A-25; § 2-9B-25; § 2-9C-25; § 2-9D-25.

- Providing false or misleading information in connection with a certification application or recertification;
- Providing false or misleading information in connection with the submission of a bid, proposal or Good Faith Effort documentation;
- Failing to meet the contractual goals or sub-goals; or
- Repeatedly failing to make a Good Faith Effort to comply with the substantive provisions of this chapter.²⁵¹

D. Business Owner Feedback Interviews

We met with 192 business owners or representatives from a broad cross section of the industries from which the City of Austin purchases services and goods to elicit feedback, both positive and negative, on the City of Austin's M/WBE Ordinance and on the City departments with responsibilities for implementing the Ordinance, along with corresponding recommendations for improvements.

The following are summaries of the issues discussed. Quotations are indented, and are intended to represent the views expressed by multiple participants.

1. Significance of the City of Austin's MWBE Program and the Importance of SMBR

There was almost unanimous agreement among minority- and women-owned firms that the M/WBE Program, despite certain limitations, was absolutely essential for creating opportunities. Most M/WBEs reported that being certified provided opportunities that otherwise would not have presented themselves. The Program was seen as critical to allowing M/WBE businesses access to business opportunities with the City, elsewhere in the Austin market area, and beyond.

[W]ithout these programs, there would be no participation and yes, discrimination will run rampant.

In my opinion, and a lot of other Black contractors here, yes, it is needed.

[T]he existence of the program creates the opportunity for you to at least be acknowledged that you exist.

²⁵¹ Id.

A nonminority female business owner stated:

I think for us, it hasn't necessarily allowed us to win work, just because of our certification, but it has sent us on to have distributor shows that we normally wouldn't have because we do have our certification. That has allowed us to [win] more in new jobs.

Several M/WBE owners also agreed.

[W]e were not a DBE for ten years and we were doing quite well on our own. But once we got our DBE [certification], they are knocking at our doors all of the time for us to do work for them and we have clients all over the country.

And we have won some projects that are large size and high profile thanks to the MBE Program. And, I mean, obviously, we wouldn't have—it is not like that was the reason why we won the job, but it certainly helped.

We're really finding—we're [now] a several million dollar a year company. We've worked our way up and we work really hard and we do what we have to... So, we really stand on the goals of the... program and we really believe that if you hire just good contractors and good people, the rest of it flushes itself out.

Many of the non-M/WBE firms expressed their strong support for the goals of the M/WBE program.

I think it's an excellent goal to utilize people who you wouldn't otherwise get the opportunity. But I think the execution is extremely poor.

It's been pretty positive. If we were really casting about and just having difficulty trying to find a subcontractor that would help us meet the goals, we called and consulted and you know, asked their assistance in trying to find someone so that we could do our best to parse out the work and try to reach the goals.

[W]e've been introduced to some people that we might not have before and we've used them on commercial projects as well as ones that, you know, didn't have these goals at all once we found out about them.

As a prime, my subs have to be low in order for me to be low. I don't care what color you are or who you are, if you are not low, I can't use you because I've got to be low.

A smaller number of non-M/WBE prime construction contractors did not generally believe that the M/WBE program benefited them. Some considered the program a threat and others indicated it was time to move beyond the issue of race.

This is the kind of thing that discourages me from pursuing City work. You know, I look at that choice and think I'd rather not train my future competition.

I would like to think in this day and time we, we have elevated ourselves above that. Okay. We deal with people, we deal with their characters and not their color and not superficial things that people did years ago.

Despite widespread acknowledgement of the importance and value of the M/WBE Program, many M/WBEs were highly critical of SMBR in certain respects.

They [SMBR staff] don't know the ordinance. They need to know the ordinance that is applicable to the work that they do. And they do not know it.

[W]e had one instance recently...where an SMBR staffer advised the sub to not challenge the change request that the prime was trying to do to get him off the job. In other words, this SMBR staffer telling the sub—and [the sub] is in compliance, this person is in compliance—telling the sub to walk away from the job and just let it go and not, not fight for it. Basically he was just telling, he was telling him completely opposite of what I would think SMBR is there to do. And that kind of shocked me. So that's, that kind of behavior from SMBR staff was pretty shocking. When he was confronted in front of an awful lot of people then he backpedaled and says no, that's not what I meant. I meant, something else. Something opposite.

But, back to the City, the DSMBR and so forth, one of the things that they are having a problem with and in compliance or the regulation or the ordinance, is that DSMBR don't know the ordinances. They don't know the regulations. When they are out there dealing with primes that aren't doing GFEs, they are out there finding primes that are substituting contractors. A lot of times I can predict, this is what is going to happen, because they have been doing it for years.

I think we have a very solid ordinance. ... [I]n terms of what it is as a document I think it's as tight as it could be. The problem is in the implementation of those policies. But

you've got to understand them to know how to use them. And the competence level at SMBR is just not such that you have people who really understand what these words are saying in that ordinance and know how to use them that way to make those decisions. Sometimes you have to make black and white decisions but when you do you've got to support that decision. And a lot of times the expertise is just not there to know how to support it.

And the problem, that is, the you know, the problem is just in the implementation of it and having people who understand it and know how to support it and know how to implement it and defend it. That's what I think the problem is, and has been for years. ... Teach people, test them, [then] hold them accountable.

That's another issue I [see at SMBR]. This is just my personal opinion. I feel like they are there to serve the prime. I mean not [that] the [M/WBE] Program is there to serve the prime but the, the compliance officers, some of them. I'm not saying all of them. They're, they don't seem to have enough training to understand their roles.

You know, I think that whole department just needs an overhaul to train people to understand what your role is. What your role and what your function, you know, in certification, in compliance. And overall they need to know who they serve. Not the City. Not your boss. Your clients, the people you serve, your customers, are minority vendors, minority businesses. They don't seem to understand that. And for compliance, you know, I don't know, my experience with some of them are like, they are trying to tell the minority vendors, you know, you need to comply with this, when they should...police their, [be] there to police the prime contractors.

But I don't think they, they understand their role. Their role. I feel a lot of [them think], "I'm here to make sure that you do the right thing, the [minorities]." Not. And then when they deal with the primes they're not very, you know, straightforward or they're not very...they're not communicating to them what they need to do. I don't know if they're, if because of the sheer massive wealth and fortune these prime contractors have, that they don't, they don't think that they, they can talk to them that way. You know, like minority business are smaller.

So these compliance officers need to be trained to talk as a businessperson to another businessperson. You know, they should have that level of skill and experience and confidence to tell them that, hey, if you want to do business with the City, you know, this

is what you need to comply. You know, instead of coming around and talking to the minority vendors, you know, what you need to have. What you need. Like that's what I hear all the time. They'll tell, well you need to work, you need to find out what the prime does. What the prime wants you to do. I mean. I mean it is true in a sense. That's another issue is that a lot of our minority contractors, they are so small, they don't, they can't really bid directly to the City. They have to go through the prime.

A lot of the SMBR people don't know or don't even have a copy of the new program regulation changes. They have never seen it before...Implementation is the key. But you've got to know the regulations in order to implement them.

You talk about SMBR not doing their job. Well if you look back and look at all of the directors they have had over the years...I don't know if one of them has a business background.

If you have staff there who don't even know what it is in the ordinance, and you have no accountability of the leadership in the SMBR office to ensure that it is being implemented appropriately, you have got a problem right there, before you even get out of the box.

That's not a program or a policy change that they need to make. They already have that regulation. It goes back to training and education of your main supporters: City Council, or Mayor ... on down of what those regulations are to be enforced by SMBR. SMBR are the ones who are supposed to carry out those policies of [the City] Council in that ordinance, the small business ordinance. The problem like I said before is the City Council doesn't know the ordinance.

It's all about training and developing and holding accountable the people who are paid to make sure that what's in [the M/WBE ordinance] happens. That's the biggest problem that I've seen over [many] years. And, and putting a mark, a bullseye on the City Manager's head, to say, "You better do this. You need to do this. This is also as important to you as it is to everybody else who you're here to serve."

[SMBR needs] top down support from the Council and City Manager.

Despite the criticisms, a number of firms were complimentary of SMBR and their administration of the M/WBE Program, particularly in the area of certification.

I would say that during the past two years or three years, [SMBR] has improved because of the transparency of the City. It has been getting a lot better than before.

[My experience with SMBR] ...It's been pretty positive. If we were really casting about and just having difficulty trying to find a subcontractor that would help us meet the goals, we've called and consulted and you know, asked their assistance in trying to find someone so that we could do our best to parse out the work and try to reach the goals.

2. Certification Standards and Processes

Many M/WBE firms had positive comments about the City's certification standards and application process.

I have got to tell you the City of Austin has one of the best certification processes. It screens all of the riff raff. It is very detailed. It is very thorough.

I think this is a great improvement over the past when we had to go through certification in San Antonio and we had no way of visiting with anybody personally...and I like working with the City.

[W]e certified for the first time four years ago and we just recently recertified and it wasn't that much of an issue for us...So I don't have any complaints about the City's process.

Some MWBE firms did consider it an unnecessary hurdle that the City does not accept certifications from other jurisdictions in Texas, such as the State.

I have been certified for years with by the State of Texas and a lot of cities reciprocate and will take their certification and as a small business I can't go around being certified in every single jurisdiction...why taxpayer money is being spent in Austin to do a certification program when the State of Texas, does it.

It would be helpful to small businesses, I think, if they would—other entities would accept the state certification for City certification instead of starting their own.

A number of M/WBE firms expressed concern about protecting the confidentiality of the information provided to the City as part of the certification process.

You have to give them information for your PNW...but to leave the information there, I think is quite intrusive. I don't want to leave my 1040s there. I don't want to leave my PNW data in there. I would prefer that they conduct an audit in my office...but they would leave without it.

Showing my 1040s to the SMBR doesn't bother me. Making copies and leaving them over there bothers me. So, the solution to my problem would be let them come to my office, or I will take them to their office, audit them, and make the decision on the spot.

There were three significant areas of concern regarding certification that emerged from the M/WBE community during our interviews. The first concerned maintaining the accuracy of addresses, phone numbers, fax numbers, and e-mail addresses in the City's vendor database.²⁵²

Male M/WBE: But even—but even—as far as the maintenance of that list though, there are far too many who are no longer in business or addresses have changed or phone numbers have changed.

Female M/WBE: How many faxes don't go through and how many emails don't go through?

Male M/WBE: There's far too many. I would think with the staff—with the number of companies who are on the list and the number of staff at SMBR, I would think that would be their first priority, keeping that list updated.

They don't verify names and addresses, telephone numbers and fax. So if the data goes on the availability list incorrect and you bring it to their attention ... they will not correct it. They say that they don't have the authority to do it. [The Purchasing Department] has the authority over that list. Well [SMBR] needs to get ownership of the M/WBEs on the list. Maybe not the whole City Purchasing's vendor list but only that section that is applicable to [SMBR]. I asked the Purchasing Department did they have a problem with that? They said no. They said it in a public meeting. That's two years ago. As of today that has not happened.

Sometimes they throw this bombshell on you. All of a sudden they tell you, you're done. You're no longer certified because you did not submit paperwork. ... This has happened

²⁵² Similar concerns about vendor database maintenance also arose in the context of notifications to vendors of contracting opportunities, and also in the context of payment and invoicing issues.

to me a couple of times in the past five years that all of a sudden they're writing to me saying you didn't turn anything in, therefore, you're out of here. I never got the original letter. And that's happened to my husband as well. So, I don't know if after the first letter maybe they can email you. They have our emails, but they don't seem to make any use of them. All of a sudden you get this registered letter and it's very alarming. You may be in the middle of a contract or negotiating another contract, and you get this letter, and it's happened to me, and it's happened to my husband's company. So, maybe a follow up after the first letter, call or email.

We kind of had a flip side this year happen. We get our three letters, notifications, so I submitted our stuff back in May. Two weeks ago I called and I said "I haven't ever gotten a letter back." [The SMBR staff person] goes, "Oh, you're stuff's all been turned in." Well, I have 11 other states [that] like to see your letter. "Oh, okay. She sent me the letter immediately, but prior to that, she wasn't going to acknowledge she had received anything." There was no acknowledgement or oh, you must have missed the letter. She had never sent a letter back.

After waiting for a pretty good period of time, I called and try to find out what's wrong, what's holding everything up. We have submitted everything; we had documented everything, and they said, "Well, there's something wrong with your name" and I said, "What's wrong with our name? We have been doing business under this name for the last 25 years, and how come it's wrong?" And they said, well it's because on our invoice we put down our name, and then "Consulting Engineer" and he said, "under your vendor [record] you don't have "Consulting Engineer," so I said, "Okay I'll remove that", and so I went in and changed it and removed that consulting engineers and then sent it back in, and I say, "Is that okay" and he said "Yeah, that's fine." Then we waited again another month and a half, nothing. I called back, and they said, well let me go find out what's wrong. He looks at everything, and everything looks right to me, and he said, "There's something wrong with your address, your address is not correct." [I said] "We've had the same address for the last 20 years. How come it's not the same address?" [The City representative said,] "On one, its spelled West—W-E-S-T—on the other one it is [just] W."

The second major concern expressed about certifications and certification renewals was that the process was often perceived to be too lengthy.

... You have a checklist. I go through my checklist. I add all this paperwork to my file. When I check everything off, I turn it in. What takes so long? For months, and months, and months for you to check off what I already provided for you? You can do it in 10 minutes. Where does that come in with months? It is made to discourage you. It is made for you to give up. "Well, I can't bid on this contract." I haven't even so much as gotten

an e-mail or phone call or anything when I was not certified. They are not interested in me. So, how come they can't speed up the process here at this office here?

I'm pretty new to the program. I've been certified for about a year. I thought the City was very helpful with me. I thought there was just too much paperwork. It took a while. It took a long time for me to do this and if there is a way to condense it somehow, I think that that would be better. The City, though, over here was really helpful helping me get along through the process. It just took a long time.

People submit their documents to get recertified. It could take up to half a year almost to get recertified because they lay it over here on this table like it kind of like when you do an SBA loan if there's a sheet missing, instead of them getting back with the customer that the sheet is missing. They don't. They just lay it over there and forget or they go on vacation. ... Didn't reassign it to someone else. Just left it in there. So the Assistant Director had to get the keys, go in the office, get the certification papers and assign someone to go out. Because the only thing that was lacking was a site visit, and get them to do a site visit. So that person was going to lose [their] subcontracts at ____, ____, as well as the _____. So that's a small company can't afford that. And they had put their certification in in a timely manner.

Interviewer: How long did it take you to get certified?

Male M/WBE: Several months.

Interviewer: Several months?

Female M/WBE: Several months.

Male M/WBE: Yeah.

The third major area involved perceptions about the integrity of the certification process and inconsistent application of the rules.

Interviewer: Any other issues related to certification? I've been told they have 60 days to certify you once they get all the documents. Is that basically the time frame that most of you have found that you were able to get certified within that 60 day period once you gave them all of the documents?

M/WBE Female: 60 days.

M/WBE Male: Well, hold on, it depends on who you are.

M/WBE Male: We have had individuals that certified in 48 hours.

M/WBE Male: Say that again. Say that again.

M/WBE Female: Yeah, that firm—

M/WBE Male: They got certified in 48 hours.

M/WBE Female: That firm came out of Houston.

M/WBE Male: That is correct.

M/WBE Female: ... No certification. No local presence. No nothing. And they certified them and gave them that contract.

M/WBE Male: It was 48. He turned it in on a Friday afternoon. He got certified on Monday.

M/WBE Female: Yes, that Monday he had that. And then the next week had the contract.

One of the things that just came—was brought to my attention. I think last year I believe, we had an Assistant City Manager that, I can't remember if he quit or resigned, or what he did. Got fired or what the situation was. Anyway, a few weeks later, he applied for certification. I think my understanding, that was an engineering firm. I believe that is what it was. That he bought out with no money. No money. And they certified him. We fought it and met with the [new] Assistant City Manager, which was a joke. And they end up still certifying him and he had no experience as an engineer. ... So, we have a problem and we are going to continue to have a problem, like I said before. I don't know what is going to be in your report, but if it don't come up with something to address what the City is doing, it don't matter what we do out here, it ain't going to change anything.

3. Notice of Upcoming Opportunities

A consistent complaint from both non-M/WBE and M/WBE contractors was the unnecessary faxes and notices that they were sending and/or receiving.

And the fact that the primes are forced to send out these mass e-mails that everybody's saying we're looking for surveyors, instructional engineers, and architects and what not...It's a colossal waste of time for everybody.

But what makes it such a bigger waste of time is that you have construction contractors sending architects and engineers invitation to bid and they're using that to qualify their Good Faith Efforts. That's a loophole in the system.

They love Good Faith Efforts in Austin, Texas. I wish I had the dollar amount of money that they make Good Faith Effort precede everything. If they can show Good Faith Effort that they sent you a notice, all they're doing is just going on the fax machine creating this list. Like they sent you something. Well anybody can manipulate the fax machine if they want to, you know. And then it comes out, well we sent you this notice on such-and-such a day. But if you looked at the address on the, I mean the fax number, you see that the fax number's incorrect. And a lot of that happened. So compliance.

4. Pre-Award Processes

a. Meeting M/WBE Goals

The City's program permits M/WBE bidders to count their participation toward the goal for which they qualify but cannot be counted toward another racial or ethnic specific sub-goal. Several M/WBE prime firms stated that they disagreed with the requirement that they should be required to meet contract subcontracting goals.

So, as general contractor prime bids, they really don't give much credence to that because I still have to meet the goals. I don't know why because when they pay me, the City gets...a 100 percent minority [firm] and all that money can be counted toward that.

A significant number of non-M/WBE and MBE firms thought that race-specific goals hindered the success of minority firms.

The percentage marks that the goals that the City has for minority business participation...I think it really inhibits the success of minority firms. The 1.9 percent goal for African American participation is a crime...You know there are some excellent firms that should have a bigger piece of the pie than that, but if you as prime are going in and saying, "okay I need to hit these marks" what if I wanted to hire an African American firm to do 20 percent of the contract, a mechanical engineering firm to do 20 percent of an A&E contract and yet I've got to meet these other marks of Hispanic and Asian and women owned businesses...So I really can't hire that African American firm to do the mechanical engineering services, even though they might be the perfect person for the job....

We are putting together this proposal, and there I got my percentages and I'm way low on the WBE. So I finally tell my business development person, "Call this woman because we have got to get that percentage, call this woman" and then she calls the Asian that was going to do it and said, "Hey you are not on the contract."

[B]ecause the other thing that happens is general contractors ... if they are attempting to meet the goals, they only go to the amount. So that if it takes, as an example, \$100,000 to meet the African American goal, that is it. If your bid is \$105,000, they don't need that \$5,000 or they don't need you. They may go to somebody else. So, they do just what they have got to do. And that to me is a justification for, yeah, you know, yeah, the program is needed.

African American Male M/WBE #1: One of the concerns that I have is that, for me, I am in [a specific construction trade]. And one of the problems that I always run into, is the goals are like right around, average around 2-3 percent for Black on these contracts. But, there is nothing in the breakdown of the scopes award that averages that. So, if you are bidding on a project, your scope award might be 15 percent of what the total of the project is. Well, you are not going to even come close to

African American Male M/WBE #2: You sure ain't. You might as well not even bid on it.

M/WBE firms also expressed concern about the high number of contracts with zero goals and the perceived singular focus of the SMBR department on Construction.

I'd love to have somebody at [SMBR] focus on Professional Services contracts that are not Architectural or Engineering...or Construction...But a lot of us are in other kinds of services...And we don't have anybody looking out for us. So I do look at things that come up and many of them, I would say 70-80 percent of them say "No M/WBE requirement".

But, if you really want to see the sin that occurs, you have to go to the City Council Chambers and you have to read the agenda and despite the ordinance, you will see project after project after project, that says zero minority participation. ... Zero, zero, zero, zero, zero, zero.

So how, why do you even put the percentage there? That's why I was saying that's—you can't put the percentage there and say "zero percent participation" when there is none. Why, you know, it would be better to say "not available," so people don't try to look for it. You should say it's exempt. You should be honest.

An M/WBE trade association representative recounted the following.

Our association recently had an internal survey, and many of our members who are certified in the Nonprofessional Services and Commodities categories complained about no participation goals being set, therefore, no subcontracting opportunities, when in

reality there are plenty to be found. For some reason, these two categories never have goals since time immemorial. But the City ordinances clearly set the annual goals for them [just] as for the Construction and Professional Services categories. It's just that they were never implemented.

Among non-M/WBEs, the consensus perception was that the contract goals exceed the available pool of M/WBE firms.

Is there anybody on the front side going, okay, how many of those do we have in trades available? Because you are setting goals that are not obtainable.

Some non-M/WBE firms also perceive that the program runs up costs and is negatively impacting contracting with the City of Austin.

So I think the City is ultimately, the City is paying a premium and a large one, in order to keep this [M/WBE] Program in place.

[H]onestly, I think there's a lot of the larger GCs in town are not bidding City of Austin work anymore because of [the M/WBE Program].

Several non-M/WBE contractors also objected to calling the goals “aspirational.”

That's a problem is if you're low bidder and you have not met the goals, then you get—then it's a microscope...it's an uphill battle and a microscope assessment of exactly what you did. And if there's one box you didn't check along the way or they feel you did not make as good faith an effort as maybe you should have, the number two bidder is getting the job if they made the goals.

I think the perception is—we don't do that much public work, but the little bit I've been on, the perception is that you don't [meet the goal]...you're not going to get the deal.

Some non-M/WBE firms stated that the City should set goals more closely tailored to the actual capacity and the availability of M/WBE firms for projects.

Like one project we have right now, we meet the overall goal rate, the Hispanic is there, the Asian is over the goal and women is over the goal, but we are struggling mightily to meet the African American goal.

You know, when you get into the City uses it by ethnicity or gender or, you know, they have different categories, which makes it difficult, because the pool—the African American pool, in particular is not very deep.

[W]e're going to say 20 to 30 percent requirement across the board. And it's fine if you've got a large designer project or a large specialty project, but one you get into that nit-picky stuff, whether you're providing [one] service or it's a specialty that you can't really find another sub to help you, you get penalized for that process.

A number of non-M/WBE contractors also expressed frustration in reviewing their Good Faith Efforts that the City was inflexible and did not understand the business realities of the industry.

[W]e failed to notify some of the associations. The Black Contractors, the Hispanic Contractors... We actually had participation in our bid... I think if the... coordinator was able to look at the totality of what you've submitted. And I think you can make a fairly reasonable... assumption whether somebody honestly tried or not.

And you try and explain, "Hey, no, I want to be forthright and I want to be able to help, but this project does not require that. They go, "Well, you've got to do Good Faith." And that's like, Good Faith Effort doesn't do you any good in this project. And so you are spinning your wheels and you're wasting valuable time and costs associated with it.

Some non-M/WBE prime contractors were concerned about M/WBE paperwork requirements when submitting a bid.

[W]e have multiple concerns about the program... One is the, just the administration and paperwork part of it.

I'll say, or the paperwork of or the overhead administration is difficult for us.

I think there are a lot of contractors, specifically subcontractors that don't bid the work because of the paperwork involved.

I had bid on a City project as the prime and I got it. I wanted a subcontractor on the project for a variety of reasons... the RFP said that we have determined no goals are necessary for this, you don't have to do a Good Faith Effort... So because I wanted a subcontractor on there to fill a gap because I am a small firm I have to go through the whole Good Faith Effort... I had to go through that when there were no goals on the project.

b. Contract Solicitations

There was significant support among the M/WBE firms to improve the selection criteria to improve the opportunities for small firms to win City contracts.

The City puts together...their selection committee. You know, basically nobody knows how that is done, they just put the team together and there not always very even, and they're influenced by larger firms...I don't know how to overcome that but I think the City needs to take a real hard look at that, how they put it together.

I want to give you an example of a recent RFP that came out from the City, and ...we do general consulting...but there were several things in there that automatically I could see I'm not even going to bother submitting a bid because they want a big firm. And so it was things like, the way they specified the experience, and...if they ask for audited financial document that automatically means that it's a large firm.

At least one women-owned firm disagreed with the concerns raised by the other M/WBE firms regarding the selection criteria and process.

The City of Austin, though, by and large has been real good about remedying any problems if they have made their solicitations too restrictive.

Several M/WBEs expressed reservations regarding the City's commitment to work with the M/WBE contracting community.

But time and time again, this is an inconvenience program. This program is something they truly don't want to embrace it. They don't want to use it. It is something they have to do so they go through the exercise of doing what they have to do. In some cases, I believe the City is doing the same thing. Because if they really want to do this, it would be done.

Unbundling larger contracts into smaller pieces was also suggested to increase opportunities for M/WBEs to perform as prime contractors. Large contracts, and the requisite bonding or insurance requirements, place contracts out of the reach of the majority of M/WBEs and other small firms.

So, we can go in as a prime contractor if the City of Austin would just reduce the contract into a little bit smaller of a contract.

I have the capability of being the actual general contractor. But Austin Energy refuses to change a very minor deal of just separating the contracts that they have. Instead of separating the whole city into two parts, if they're willing to separate it into three or four parts to where a smaller minority firm can actually bid as the prime, then we would be

able to defeat any of these companies that have been doing business here in the City of Austin for literally 25 years.

So, but the flip side of that, how do you get more M/WBE firms selected as primes? Because when you are paying you're more in control of your destiny and it's not the 15.6 percent slice.

There was significant support for streamlining the contracting process and taking advantage of technology.

And there are software systems out there that will actually send a notice to a subcontractor saying that, "Hey, prime contractor says that you have been awarded this subcontract," and you can begin the process at that point of verifying that you were awarded the contract for this amount and then the system would track your payments from there.

The use of "task order" or "on call" contracts was criticized on two grounds. First, M/WBEs selected as prime contractors, subcontractors or consultants often did not receive any actual job orders. M/WBEs selected to participate on task order teams had no ability to predict if, and when, they would be utilized. Second, it is difficult for prime contractors to meet M/WBE subcontracting goals on an on-call in the absence of actual scopes of work.

[O]ur biggest dilemma is when the general contract is let you don't know exactly what task may come along. So you end up spending a lot of time, a lot of minority business time filling out forms and things, and then I can't even tell them whether in the next three years I might use them or not.

Until the actual task or work assignment is given, that's when you can really effectively put together a team.

There was also general support for some type of local preference and small business program among the majority of firms across all business categories.

These are multinational firms...and \$500,000 toward firm like that—to a multinational firm is a drop in the bucket. But \$500,000 for a local firm—I mean that makes a big impact on our business plan and our potential growth. So, how can the City justify hiring five to six big firms on a project whose I guess, design standards, design requirements are minimal.

[W]e're trying to beef up that work so we can go in for it. But there is nothing given to you in Austin you know, for the City of Austin, if you're local...but there's something to

be said for being local firm that worked and we've been in Austin since '82. So, so I think what we are really getting to [is] there should be a small business reserve set aside for small businesses that we compete with the other small businesses.

I would like to see a strong preference for local firms, firms that are based in Austin, in the evaluation matrix.

In several of the focus group sessions and stakeholder meetings, some business owners urged the City to support Veteran-Owned Businesses.

Now I would like to see [the program] include disabled veterans. I think we owe, the country owes something to our veterans. So I think it should be enlarged to include disabled veterans in the program, especially local companies.

5. Contract Performance

a. Monitoring

Many M/WBE firms complained that the compliance monitoring of contract performance during the term of the contract was not very rigorous.

And then at contract closeout. When the project is over with and there is a monitoring process that should take place to ensure that the firms named on the compliance plan have been utilized in the project. It doesn't happen, but there is no recourse.

I think the City of Austin needs some type of model or tool to help them with compliance. To make sure that, one, that we are being paid...So, I think the City here, from a compliance standpoint, from a subcontractor standpoint, so that we do get paid that we need some type of compliance in the City that we currently do not have.

There is nothing that says like if they promised us 10 percent of the contract when we team with it, there's nothing of any kind of compliance that asked us, "Are you getting 10 percent? How much do you have out on work orders? How much of your percentage did you receive in your contract?"

Some M/WBEs expressed the view that the City's monitoring and compliance efforts were improving.

I actually just got an e-mail from the City of Austin the other day with that exact situation where they asked me, this general contractor had submitted that this was your pay, a

change order, the contract amount, the retainage, it was all broken down, would you please verify it and how much you have been paid.

There was, however, a strong consensus among the M/WBEs that the City has consistently failed to enforce the Program regulations.

[Y]ou go down there and ask them how many people have you disbarred or you have found sanctions against them. It is zero. They have had audits where they have found people who actually failed them, but there is no consequences associated with that...I am saying, when you see the same repeat people, over and over, and over again, and they are still getting away with it, they need to be debarred.

That is one of the big things that there is a problem for me. They've got the contract. They are the owner of the contract. They can enforce it, but they won't enforce it.

I don't understand why the City keeps giving some of the GCs that they know that they have a bad history of ripping people off and keep giving them contracts. That doesn't make sense to me.

If you're a minority, they're going to walk over you; especially those white contractors. They come from out of state, they come in here and they hire us, and with no intention of paying us. I've been before the City Council ... and they just sit there and nod their heads and they say—"Oh, yeah, we're going to do something about it." ... You call SMBR. When I applied to work with the City, they told me, if you become a GC, if you don't pay your subs, we're going to stop your pay. Well, I went up there and I asked them "How come you don't stop this white man's pay?" It's because I'm a Mexican American, that's why they're not going to pay and they don't care whether I get paid.

Mediation. It's packed. It's a no-win situation. Because the minority company's limitation of financing [cannot afford] the legal teams to come in there to help them with their case, to state their case. The GC comes in there with three or four people, a legal team. And City staff is scared of anybody outside of, any attorneys outside. Well the staff is. Now that City Attorney over there, she's not but she doesn't know anything about it because they're not telling her about it because they assign an attorney for each department ... Okay?

About two years ago when they came down with the new plan and so technically there's now money for enforcement, money for compliance, you started hearing talk about it but still there is no method for carryover from contract to contract. The next time that prime who didn't pay their money on the last contract, on the previous three contracts, when they go after the next project with the City of Austin, there is no carryover for their performance of not meeting the plan.

And so they've got to substitute you with like kind. So if I'm African-American they've got to look for another African-American to meet those same qualifications that can perform that work. Many times that doesn't happen. They don't even, they don't even follow up to see if this is happening. Somebody else is out there on the jobsite by the time they find out they've done this. They're supposed to give the company violations. And the way they count violations, ... Like if you did a, if you have this project and it's five or six violations, they only count it one time. When they should be counting each one of those violations independent of each other. But they don't.

And so they find some loophole to let it ride. Sometimes they will call them, call them on the carpet about it but [typically it's] business as usual, so nothing really happens. So people lose out. And some of them lose major dollars. And so they just get frustrated, say I'm just not, I go somewhere else. Why waste my time trying to do business with the City of Austin. Because it's been going on. There are some people who've been on that list for 15, 20 years, never had an opportunity. I know they're not going to use everybody on the list but they never got a call, you know....

I think what really—what it comes down to is there is no financial penalty. If it is costing the GC—if the contract—that is a big financial penalty for him because he has not complied.

So, there has to be accountability where you say, "Did you pay your minority subcontractor?" There has to be accountability. There has to be something where we get paid or I am not taking any more jobs. I'm not working for free no more.

b. Payment

In general, both M/WBEs and non-M/WBEs reported that they were paid slowly when they performed as prime contractors.

The City of Austin is slow pay.

There are good project managers, and there are bad project managers. Some of the project managers handle it very well, and I've gotten paid very quickly. Some of them are just lazy.

I, actually, was doing inspection work. And it was time for us to be paid. No, it had gone by a year, and they need warranty work so they requested our company to go back out to do some warranty work. As to date, we still have not been paid. And I call the City...and we [are] still not paid today.

I can name two of them right now that I am working on right now that I have accounts receivables out 120 days.

I have recently had a problem with the City payment and was really confusing. I sent an invoice on the same project, initially; we got paid, and the second invoice we didn't get paid, third, didn't get paid. After waiting for a pretty good period of time, I called and try to find out what's wrong..."Well, there is something wrong with your name...so I went in and changed it...Then we waited another month and half, nothing. I called back, and ...he said, "there's something wrong with your address, your address is not correct." "We've had the same address for the last 20 years."

Several contractors, however, reported that they had not had any problems with timely payments on their prime contracts with the City.

I've been really fortunate. We've done, in the 15 years that we've been trying to do work and the 10 years that we've been certified, we've done five or six projects for the City or through a sub and we've never had any payment issues.

In many cases, we'll pay [subcontractors] before we get paid to keep them functioning.

In contrast, a significant number of M/WBEs reported problems being paid when working as a subcontractor or supplier.

As a prime, they're great at paying when we're the prime. But when we go through our subs, oh, my gosh. They don't have any compliance with the subs and I could name a couple right now that are probably 90--I know they've been paid because I have prime contracts with Campo and City of Austin and they pay us--if the invoice is good, it's under 30 days and we have our check. But if you're with a prime, it's 90, 120 days. And I know they got paid in 30 days unless their invoice was screwed up.

If you look at this book that the SMBR has. It says "Post-award work monitored. The City will monitor post-award compliance information regarding the use of certified MBE/WBEs listed on the compliance plan. It says that the "Prime contractor is going to abide by the City of Austin's SMBR rules." "Bidders are advised that the contract resulting from the solicitation includes a subcontractor's payment clause." The clause requires all subcontractors to be paid within 10 calendar days from the date that the prime contractor has been paid from the City. ... That's not happening.

Both the non-M/WBE and M/WBE firms complimented the City's recent consideration of improving the payment process and addressing the issue of early release of retainage.

I saw an issue that they're considering right now to do Quick Pay. So the City of Austin is looking at something to do earlier, well two things—earlier release on retainage and then a Quick Pay system so they can pay faster.

c. Retainage

There was a major concern among most M/WBE construction firms regarding the City's policies on retainage.

10 percent retainage and held for a year, that's pure profit. How many can use their 10 percent...I've had some held for a year, 2 and 3 years.

If you are the first one on, you come in, you are a civil contractor, you got all the grades cut, and you are done, you are off the job, you're still not going to get paid your retainage maybe for 2 years instead of 1 year because you were early, you got done, they are going to hold it till—they don't start releasing retainage until the end of the project...they should start releasing retainage from your time of completion of your service.

d. Front Companies

There was uniform perception with MBE and non-M/WBE firms who stated that shams and front companies are a problem in the M/WBE Program.

According to several non-MWBES:

You know, we're competing against companies that it's in, it's just in paperwork only that it's woman-owned. You know, when a guy's name is the name of the company and it's a woman-owned business that's—it makes it tough and makes it hard to understand.

We have one of our major competitors...whose wife owns 51 percent of the company...Now she's a sweet gal and I know her well and all that other stuff, but it seems to me that they are just prostituting the process is all they're doing.

And according to several MWBEs:

I will give you my own experience. I worked for a certified vendor, the DBE, but that is his wife and they are white. And we used to [get] work for them. I have never seen the lady before. She does have a desk at the office with her name on it. But it is very obvious. Even I had a conversation with the guy and I told him, "I understand what you are doing." He said, "Well, everybody is doing it so what is your problem? Do you want to work or not?"

There is a situation that is going on right now in Austin where this gentleman he had his company and he filed bankruptcy so he put it in his wife's name. His wife died two months ago. She had fired the secretary. He brought the secretary back...They are working on certification paperwork as we speak to put it in the name of the secretary.

M/WBE also expressed fear or reluctance to complain about nonminority contractor abuses in the M/WBE Program or to raise the sham or front issue.

And then when you have that attitude, when you stand up for yourself, then they label you. They tell GCs not to use you, even though they have got to meet—or they don't meet the goals.

Nonminority contractor violations or abuses of the program often go unreported because of fear of retaliation.

What she is saying is, if you do that, and then you target right back to her, the next time a job comes up for her, she won't get it because they will punish her.

My experience [is] if you complain, you don't get asked to be on a team anymore.

IX. Recommendations for Revised Contracting Policies and Procedures

As required by strict scrutiny, the City of Austin Disparity Study documents evidence regarding the utilization of minority-owned and women-owned firms on City prime contracts and associated subcontracts. It also documents evidence related to the success of minorities and women in obtaining business elsewhere in the Austin-area economy, particularly in the private sector. The Disparity Study has accumulated both statistical and anecdotal evidence in this regard.

This evidence provides the City of Austin with information relevant for its consideration of whether to implement renewed M/WBE policies that comply with the requirements of the courts and to assess the extent to which its past efforts have assisted M/WBEs to participate in the City's contracting and procurement opportunities. It also provides the City with information that can assist it to narrowly tailor its M/WBE policies to be consistent with the findings in the Disparity Study.

A. Race- and Gender-Neutral Recommendations

The courts require the consideration of alternative race neutral means to increase M/WBE participation for a narrowly tailored M/WBE program.²⁵³ While the City is not obliged to "exhaust every conceivable race-neutral alternative,"²⁵⁴ such efforts are an important element of a narrowly tailored program, so that the burden on non-M/WBEs is no more than what is necessary to achieve the City's remedial purposes. Increased participation by M/WBEs through race-neutral measures can also reduce the need to set race-conscious contract goals in the future.

We therefore suggest the following continuations and/or enhancements to the City's current efforts, based on the Disparity Study's results, including the feedback we received during our interviews with minority, women and nonminority business owners as well as with City staff.

1. Increase Efforts to Ensure Prompt Payment on City of Austin Contracts

There was uniform agreement across ethnic and gender groups that slow payment remains one of the most important issues on City contracts. Slow payment by the City, in turn, slows down payments by prime contractors to their subcontractors. Almost all of the minority owners we spoke to indicated great difficulties being paid by primes, especially in the later stages of the contract. The M/WBE firms we interviewed recommended that the City strictly monitor all City contracts to ensure that contractors are making payments to their M/WBE subcontractors and meeting their other obligations under their contracts.

The contracting community's concern about prompt payment applied not only during the course of the contract but on retainage as well. The City of Austin should review its policies on

²⁵³ *City of Richmond v. JA Croson Co.*, 488 U.S. 469, 507 (1989), citing *United States v. Paradise*, 480 U.S. 149, 171 (1987).

²⁵⁴ *Id.*

retainage and, where feasible, release retainage directly to the subcontractors for work performed, inspected and approved, provided this does not place the City's economic interest in jeopardy on a project. The retainage should be paid directly to the subcontractor or in the form of a joint check to ensure that the money is paid to the subcontractor. This recommendation is particularly significant for the contracting community on larger and more complex multi-year construction projects.

Adoption of contract tracking technology, whereby prime contractors and subcontractors could see where an invoice is in the approval and payment process, would also be helpful. Technology of this kind would also allow subcontractors to determine whether or not a prime contractor has been paid by the City and whether the subcontractor's pay application was included in the prime's pay request.

2. Ensure Bidder Non-Discrimination

Some M/WBEs expressed concerns that prime contractors were not soliciting their subcontractor quotes in good faith on City projects, and many indicated that they were seldom or never solicited to bid on non-goals projects, whether public or private. Some non-M/WBE prime contractors also indicated that M/WBEs quotes were higher than those of non-MWBEs, forcing them to choose between meeting the M/WBE goal and submitting the lowest possible bid. To investigate this, Austin should require all bidders to submit all of the subcontractor quotes received on larger City projects. The prices and scopes could then be compared to detect whether bidders are in fact soliciting and hiring subcontractors in a non-discriminatory manner, and whether M/WBEs are unreasonably inflating quotes.

3. Review Surety Bonding, Insurance and Experience Requirements

The City should review surety bonding and insurance requirements to ensure that amounts are no greater than necessary to protect Austin's economic interests. A related change would include removing the cost of the surety bond from the calculation of the lowest bidder on solicitations where bonding is required.

A guaranteed surety bonding program for small firms might also be considered. One model for such a program is the City and County of San Francisco's Surety Bond and Financing Assistance Program. This Program makes bonding, financing and technical assistance available to eligible, certified contractors. The Program targets small contractors, including M/WBEs, and includes a guarantee pool that provides collateral for loans and bonds up to \$750,000 on local construction projects. A separate component targets contractors specifically for particularly large upcoming projects.²⁵⁵

To the extent allowable under State law, the City might also consider introducing an owner controlled insurance program ("OCIP") for larger projects. Under an OCIP program, the City purchases an insurance policy for the project that provides coverage for all businesses working on that project. There are potential project cost savings to the City as well as potential benefits

²⁵⁵ See www.imwis.com/services/bonding/assistance/index.asp.

to contractors and subcontractors in lower insurance costs. There was general agreement among M/WBEs that such changes would reduce barriers and facilitate capacity building.

A substantial number of M/WBE architectural and engineering firms also believed that the City sets unnecessarily strict past City experience thresholds on awarding points for prior City experience that shuts them out of projects that they are qualified to perform. These standards were viewed as anti-competitive and in existence for the benefit of incumbent firms already doing City work. Austin should review its qualification requirements to ensure that M/WBEs and small businesses are not unfairly disadvantaged in competing for City work. Equivalent experience, gained, for example, by working for other public agencies, should be allowed in order to increase access for M/WBEs and to guard against unfair incumbent advantages.

4. Increase Contract Unbundling

There was general agreement that smaller sized contracts and fewer multi-year term contracts would increase opportunities for M/WBEs to perform as prime contractors. Large contracts and their requisite bonding and/or insurance requirements often place prime contract opportunities out of reach for M/WBEs. Where it is economically feasible, City departments should strive to unbundle contracts so as to facilitate bidding by M/WBEs and potentially increase the number of prime contracts awarded to M/WBE firms. One strategy would be to require each City department to provide an annual unbundling forecast, documenting efforts to segment contracts and providing justification for the lack of segmentation where it is not economically appropriate. In conjunction with reduced bonding and insurance requirements, smaller contracts are an important race-neutral component approach to expanding contracting opportunities and should assist M/WBE firms to move from bidding solely on subcontracts to bidding on prime contracts.

5. Provide Greater Access to Information for Upcoming Contract Opportunities

While business owners were appreciative of the outreach sessions that the City provides, there was uniform agreement across ethnic and gender groups of the need for a central online source to provide continuously updated information on future City contracting and purchasing opportunities.

6. Facilitate Increased Access to Capital

Many M/WBE firms, especially African American-owned firms, stressed their difficulties in obtaining working capital and other kinds of commercial credit. The City should facilitate discussions with large and small financial institutions in Austin centered on increasing access to capital for M/WBEs and other small firms. The City should also consider establishing a linked deposit initiative that leverages the City's own deposits and other investments with financial institutions in Austin to promote increased access to capital for M/WBEs and other small firms. Under such an initiative, M/WBEs could use City contracts and subcontracts as collateral for loans from the City's depository institutions at lower interest rates and reduced credit standards.

7. Adopt a Mentor-Protégé Program

A number of non-M/WBE prime contractors expressed frustration regarding insufficient availability and capacity in the pool of local M/WBEs to meet the City's goals. The City should consider adopting a Mentor-Protégé Program to facilitate the expansion of M/WBE capacity. This approach was welcomed by M/WBEs as well. A Mentor-Protégé Program seeks to further the development of smaller M/WBEs by providing assistance in performing larger projects, diversify into non-traditional areas of work and competing in the market outside of the M/WBE Program.

A City of Austin Mentor-Protégé Program could be modeled after the guidelines in the regulations governing the Federal DBE Program.²⁵⁶ Elements of such a program include formal program guidelines; a City-approved written development plan that sets forth each party's objectives and roles; the duration of the arrangement and the services and resources to be provided by the Mentor; and a fee schedule to cover the direct and indirect costs for services provided by the Mentor for specific training and assistance to the Protégé.

Mentors could receive credit towards meeting M/WBE goals, and protégés would have greater access to contracts and increased opportunities to compete for larger projects and to grow into prime contractors. Additional incentives, such as reimbursement for participation costs, would also increase the attractiveness of a Program to potential Mentors.

8. Continue to Provide Supportive Services for Construction Firms and Expand Supportive Services for Non-Construction Firms

The M/WBEs we interviewed were critical of SMBR for their lack of understanding of the realities of operating a business and urged more formal training of the personnel on the reality of running and operating a construction and/or professional services firm. M/WBE firms also expressed support for increased opportunities for access to City project managers, in order to establish relationships and build trust.

Professional service providers urged the City to focus more on professional service solicitations and increase the resources devoted to providing opportunities on City contracts for professional services, not only in architectural and engineering services, but for all categories of services procured by the City.

The City should also consider developing support programs pursued in collaboration with local colleges and universities, such as the University of Texas, to develop firms and grow capacity. Possible initiatives could include a business incubator program and a construction internship program.

²⁵⁶ See 49 C.F.R. Part 26, Appendix D.

9. Implement a Small Local Business Enterprise Program

Austin should consider adopting a Small Local Business Enterprise (SLBE) Program and expand the current Small Business Construction Program. There was general support expressed for some type of small business and local business preference across all ethnic and gender categories. Given the judicial prohibition on race-based contract set-asides, such programs can be critical tools to provide opportunities for M/WBEs and other small firms to compete for prime contracts. Providing preferences to small firms on a race- and gender-neutral basis will reduce Austin's reliance on race- and gender-conscious subcontracting goals to meet the overall annual goals, as most M/WBEs are likely to qualify as SLBEs.

Further, it is important that race and gender data be collected on firms participating in any SLBE initiatives. This will facilitate the next disparity study of the M/WBE Program, which should include review of the effectiveness of any SLBE initiatives in remedying disparities on a race- and gender-neutral basis, and the effect, if any, of such initiatives on participation in the M/WBE Program.

10. Initiate Recordkeeping for Third Party Contracts

Records should be collected and maintained for any third-party contracts that received City assistance, regardless of whether or not such contracts have M/WBE goals placed on them. This will facilitate the monitoring of such contracts' compliance with the requirements of the M/WBE Program as well as the analysis of M/WBE participation on third-party contracts in future disparity studies.

B. Race- and Gender-Conscious Recommendations

1. Adopt a Renewed M/WBE Ordinance and Accompanying Program Regulations

The Disparity Study's results support the determination that the City of Austin has a strong basis in evidence to continue to implement its M/WBE Program for its locally-funded contracting activities. The Study provides statistical and anecdotal evidence of discriminatory practices and attitudes that impede opportunities for minorities and women for full and fair participation in the City's contracting activities as well as economy-wide.

The Study found statistical disparities in M/WBEs' access to private sector contracting opportunities overall, and to those factors necessary for business success, such as access to commercial credit and capital, leading to the inference that discrimination is a significant cause of those disparities. Moreover, the anecdotal evidence we gathered supports the conclusion that discrimination remains a major barrier to the full and fair participation of minority- and women-owned firms on City contracts.

In sum, there is, in our opinion, ample evidence that affirmative intervention is needed to dismantle the vestiges of a private sector system of racial and gender exclusion and ensure that M/WBEs have equal contracting opportunities on City contracts and subcontracts. It is clear that continuing the use of M/WBE goals would not be motivated by the illegitimate racial stereotypes

or blatant racial politics that strict constitutional scrutiny seeks to smoke out. There was virtually unanimous agreement among the M/WBEs we interviewed that contracting affirmative action remains necessary to ensure equal opportunities for City contracts and associated subcontracts and to mitigate a continuing lack of equal opportunity in the private sector. Absent continued remedial action, the City of Austin will likely be a passive participant in a discriminatory market area.

In adopting a revised M/WBE ordinance, The City of Austin should revive the general outlines of the current Program and consider the following suggestions.

2. Tailor the MWBE Ordinance to the Specific Type of Procurement

The current ordinance for each category of procurement does not reflect the contracting and solicitation practices unique to that industry. The current ordinance's standardized approach to Construction, Professional Services, Nonprofessional Services, and Commodities should be revised to tailor the language of the ordinance to the specific procurement category. For example, architectural and engineering services are qualification-based solicitations and should be treated differently than a traditional low bid construction contract.

3. Revise Certification Eligibility Standards

Although many positive comments were received from business owners regarding the City's M/WBE certification process, there was a significant concern expressed among M/WBE owners about the integrity of that process. The perception that certification standards have been applied inconsistently at times undermines the integrity of the certification process and the confidence of the M/WBE community in the fairness of the procurement process. SMBR should strive to uniformly apply its certification standards and avoid certifying firms outside of the normal certification process and timetable.

a. Adopt a social disadvantage test

Based upon the Disparity Study's results, African Americans, Hispanics, Asians, Native Americans and nonminority women should be considered presumptively socially disadvantaged. To ensure that individual eligibility on the basis of group membership is narrowly tailored to those who have suffered the effects of bias and discriminatory barriers, it is important that this be only a rebuttable presumption, such that eligibility can be challenged by third parties or reviewed by the City at any time. In addition, other persons (e.g., disabled nonminority males or veterans) must be able to seek certification by showing they have individually suffered bias such that their opportunities to form firms and to achieve entrepreneurial success in Austin's market area have been substantially diminished.²⁵⁷

²⁵⁷ See, e.g., 49 CFR §§26.67, 26.87.

b. Adopt an economic disadvantage test

Similarly, case law counsels that firm owners must be economically disadvantaged in addition to the disadvantage created by membership in a presumptive group or demonstrated individual showing. Economic disadvantage can be defined as a limit on the personal net worth (“PNW”) of the firm’s owner or owners. Such a test has been an important element in convincing courts that the U.S. Department of Transportation’s DBE program is constitutional, and the lack of such a test has been a factor that led some courts to find M/WBE programs to be insufficiently narrowly tailored. We suggest that Austin review the current personal net worth cap, exclusive of the owner’s primary residence and equity in the business seeking certification to determine the appropriate PNW for the various industry groups. The City of Austin is attempting to grow capacity and an artificial restriction on personal net worth should not have the impact of unduly hindering the growth of MWBE firms in light of the economic realities of doing business in various industries.

c. Review firm size standards

As is the current standard, only small firms should be permitted to participate in the M/WBE Program. We recommend that the City revisit its current size standards with the understanding that the definition of “small” should be transparent, fair and consistently applied. The City of Austin currently applies the U.S. Small Business Administration (SBA) standards.²⁵⁸ The City may wish to consider, to the extent allowed by law, a micro small business program and use a fraction of the small business size standards to assist emerging firms in doing business with the City. Deviations from the current SBA standards should be accompanied by a reasoned and reasonable written rationale based on current conditions by industry in the Austin market area.

d. Review the certification period

The City currently certifies a firm for three years and the firm is recertified upon the third anniversary of the firm’s original certification. The City may wish to consider certifying a firm for a five-year period or mirror the federal rules that certify a firm as long as the firm meets the PNW and business size standards or is not decertified. This approach may allow the City to focus more resources on contract monitoring and less on the certification renewal process.

e. Certification Database and Outreach

A number of nonminority prime contractors expressed concern in our interviews about the M/WBE database and their inability to find M/WBEs with which to subcontract in order to meet City goals. The City of Austin should make ongoing efforts to identify eligible minority- and women-owned firms and other socially and economically disadvantaged firms to become certified M/WBEs. The City’s M/WBE database should be reviewed and updated to make sure that the directory is up-to-date. Further, the M/WBE vendor database should be reviewed to ensure that the NAICS codes listed for each firm are accurate and the firms’ lines of business are accurately reflected in the database.

²⁵⁸ See 13 C.F.R. Part 121.

f. Consider reciprocal certification opportunities

Although most M/WBE firms we interviewed did not consider it to be an unnecessary hurdle that the City does not currently accept certifications from other jurisdictions, we would still encourage the City to explore the possibility of establishing reciprocal certification opportunities with the State of Texas, NCTRCA and SCTRCA. Such reciprocity can benefit M/WBEs by reducing paperwork burdens and associated costs of certifications and at the same time can serve to increase the available pool of certified and eligible M/WBEs for City contracts and subcontracts. However, care must be exercised to make sure that any jurisdictions considered for reciprocity have M/WBE laws that are consistent with the City's and vice-versa.

There was a uniform perception among the firms that we interviewed, whether minority-owned, women-owned or nonminority male-owned, that shams and front companies are a continuing concern to the City's M/WBE Program.²⁵⁹ Additionally, some of our interviewees expressed the view that the City's certification procedures are relatively more effective at identifying front companies and pass-throughs than are those of some other regional jurisdictions. Considerations for reciprocal certification should keep this possibility in mind and ensure that any reciprocal agreements that are considered would not unintentionally weaken the City's own standards.

4. Contract Award Policies and Procedures

a. Standardize good faith efforts waiver requirements and related policies

The courts have held that strict scrutiny requires that waivers of goals be available to a bidder who has made good faith efforts. Standards for demonstrating Good Faith Efforts should be more detailed and transparent, so that bidders and City contracting and purchasing staff have a clear understanding of when good faith efforts have or have not been met. We recommend that the City adopt objective good faith efforts provisions substantially similar to those contained in the Federal DBE Program regulations.²⁶⁰

There is a uniform perception that the documentation of the Good Faith Efforts process is too often *pro forma* rather than a consistently substantive effort to reach and solicit M/WBE firms. An often legalistic and compliance driven approach to M/WBE solicitation and inclusion is impacting the overall efficacy of the program. For example, non-minority firms will solicit firms for scopes of work already committed to an M/WBE firm. The mechanical sending out of notices for non-existent opportunities, often to firms that do not do the solicited line of business, for the sole sake of creating a record, needs to be addressed. Clearly, the goals should be administered in a flexible manner and that goals never operate as quotas, but the good faith efforts process should be real and substantive.

²⁵⁹ Many of the firms we interviewed—both M/WBE and non-M/WBE—expressed strong reluctance and fear of raising the issue of sham or front companies with the City.

²⁶⁰ 49 C.F.R. §26.53.

b. Standardize M/WBE program implementation across City departments

The City should review the implementation of the M/WBE program across the City’s contracting departments to ensure that the Program is uniformly applied. Several M/WBEs and non-M/WBEs expressed concerns that the application of the M/WBE Program varied significantly across City departments. Several City departments were perceived not to embrace the goals of the M/WBE program and have refused to consider unbundling of contracts or reevaluating the solicitation requirements to ensure a level playing field. SMBR relies upon City departments with contracting responsibilities to ensure that M/WBEs have the maximum opportunity to participate on City contracts. The department heads are designated with the responsibility of achieving the goals of the Program and SMBR should develop a standard set of regulations or guidelines to ensure a uniform and consistent implementation of the M/WBE Program.

c. Scrutinize commercially useful function and increase contract monitoring

All proposed M/WBE participation should be carefully evaluated to determine whether the firm is serving a commercially useful function. Even a firm that is legitimately owned by minorities or women can be used as a pass-through or front on a specific contract.²⁶¹ Commercially useful function means responsibility for the execution of a distinct element of the work of the contract and carrying out the M/WBE’s responsibilities by actually performing, managing, and supervising the work involved.

As noted earlier, there was significant agreement among M/WBE firms and non-M/WBE firms that fronts and sham companies are a problem in the M/WBE program, and there was also uniform reluctance to come forward and report the alleged violations for fear of retaliation. Although improved, many M/WBE firms complained that the City’s monitoring of contract activity was not very rigorous. The City should increase its monitoring of City contracts, particularly large construction projects, to ensure that the objectives of the program are not undermined. There appears to be an over-emphasis of effort and resources on certification matters and when contract monitoring, particularly of high dollar expenditures, should be a priority. To address the retaliation concerns, the City should consider creating a fraud hot-line to encourage the reporting of such concerns while maintaining the anonymity of the callers.

5. M/WBE Goal-Setting

a. Adopt annual aspirational M/WBE goals

The Disparity Study’s estimates of M/WBE availability in Austin’s relevant market area are provided in Chapter III. These estimates can provide the starting point for consideration of annual aspirational targets for City contracting with M/WBEs. Of course, as Chapter IV documents, current levels of M/WBE availability are likely depressed by the continuing effects of discrimination. For this reason, an argument exists for setting goals that exceed current levels of availability. That is, goals that reflect a discrimination-free market as opposed to those that

²⁶¹ See also fn. **Error! Bookmark not defined.** and the accompanying text.

²⁶² See, e.g., 49 C.F.R. §26.45(b) (The goal should “reflect [the agency’s] determination of the level of DBE

reflect outcomes from a market tainted by discrimination.²⁶² Using the disparities in the business formation rates of M/WBEs compared to non-M/WBEs can provide a quantitative basis for such a determination.

Austin annually reviews its progress towards meeting its overall M/WBE goals. That review should include consideration of whether race- and gender-conscious remedies continue to be necessary to meet the previously established goals and whether subcontracting goals no longer need to be set for certain types of contracts. However, there is no legal requirement to set new goals every year; indeed, there will not be new comprehensive availability data until the next disparity study. Thus, the annual goals adopted based upon the current evidence should continue until new data are produced in a future study.

b. Revise the method for counting M/WBE prime participation towards meeting M/WBE goals

Most M/WBEs we interviewed expressed frustration in obtaining public sector prime contracts. This sentiment crossed industries, size of firms and length of time in business. The City of Austin currently implements its M/WBE Program solely through the use of subcontracting goals. M/WBE prime contractors can count their own participation; however, it can only be counted toward a contract goal for which they qualify. We recommend that the City reconsider this approach and develop a formula that would allow an MBE or WBE prime to count all or a substantial percentage of their participation not only toward a contract goal for which they qualify but also toward any other racial or ethnic group sub-goal that is applicable to a given contract. This approach should consider as a factor the respective participation goal or sub-goals, seeking to achieve a balance between capacity building and providing opportunity on City contracts. The modified approach need not completely relieve M/WBE primes from making good faith efforts to meet the M/WBE subcontracting goal(s). There are three important objectives served by this modification in policy. First, it expands opportunities for M/WBEs to act as prime contractors, which helps to grow their capacity. The greatest disparities are in access to prime contracts. Counting prime contractor participation, therefore, at least does not exacerbate the effects of discrimination. Second, counting prime contractor participation should increase the pool of competitive firms for City contracts, thereby benefiting Austin taxpayers. Finally, counting prime contractor participation reduces the reliance on subcontracting goals. This, in turn, reduces the burden on non-M/WBEs firms that compete in those areas where there are relatively higher levels of M/WBE availability, and therefore contributes to a more narrowly tailored M/WBE Program.

c. Count lower tier M/WBE participation towards meeting M/WBE goals

On large projects, there are often opportunities for M/WBEs to participate at multiple levels, which should of course be encouraged. Counting verifiable lower tier M/WBE utilization will increase opportunities for M/WBEs and provide flexibility for prime contractors to meet goals.

²⁶² See, e.g., 49 C.F.R. §26.45(b) (The goal should “reflect [the agency’s] determination of the level of DBE participation you would expect absent the effects of discrimination”).

Of course, until the data collection and retention issues outlined above have been adequately addressed, as well as some of the general technology issues involved with improved contract monitoring, the ability to count such lower tier M/WBE participation is likely to remain elusive.

d. Continue to set contract-specific goals

The City of Austin has properly adopted a narrow approach to contract goal setting. For contracts \$50,000 and larger, SMBR sets goals based on its assessment of the availability of M/WBEs in various industry categories; the level of past utilization on past City contracts; the contract specifications; the potential impact on non-M/WBEs; and other relevant factors. At least three MBEs or WBEs must be available for a contract goal to be applicable to a contract.

The Disparity Study's detailed NAICS-level availability estimates provide an objective starting point for contract goal-setting. Contract goals should reflect the availability of M/WBEs to perform the anticipated subcontracting scopes of the project. Thus, contract-specific goals may be higher or lower than the annual aspirational goals. If there are no subcontracting opportunities, no goal should be set. Similarly, the annual aspirational goals should not necessarily be considered as a ceiling on contract-specific goals. Data tracking and contract-monitoring software technology, or related software tools, can assist with the burdens of contract goal-setting.

The race and gender specific contract subgoals are seen by the M/WBE community as too often a ceiling and never a floor on subcontracting opportunities. Minority and nonminority firms uniformly reported that once a contractor achieved the designated percentage for that ethnic or gender group, the contractor would not award any additional work above the designated goal. The City of Austin should re-evaluate the use of race and gender specific goals and not use the overall availability number for a particular ethnic or gender group. The availability for each ethnic and gender group varies within industry categories and groups. In the goal setting process, the scopes of work should be considered and the relative availability for that type of work. The goal is to avoid contractor commitments that do not reflect the scope of services and match the available pool in that industry for those services.

It is often difficult to set goals on "task order" or "on call" contracts because the scope of the work is not fully developed in advance. The M/WBEs listed in such contracts have no guarantee of any amount of actual work, which makes it difficult to plan their schedules. Moreover, prime contractors acting in good faith on such contracts reported that listing M/WBE contractors created unrealistic expectations because they did not know the scope of work to be awarded and that they list firms in a variety of disciplines to cover the full extent of possible scopes of services to be assigned by the City. The failure to utilize a subcontractor because their scope of services were not included in a task order or job order during the contract, strains the relationship with the listed firms and makes achieving the stated goal difficult if not impossible depending upon the final portfolio of services.

Further, a number of our interview participants suggested that SMBR should play a greater role earlier in the contracting process. In particular in reviewing and drafting the initial specifications for award. This change would provide earlier and more standardized opportunities to reduce contracting barriers for such firms.

e. Consider the effects of discrimination on current levels of availability when setting M/WBE goals

Given the large disparities observed in all sectors of the economy for most presumptive groups, goal-setters might consider adjusting baseline estimates of M/WBE availability upward to partly account for the depressing effects of discrimination on current measured levels of availability. The data in Table 6.22 could be used as a starting point for such adjustments.

6. Clarify SMBR Authority

A legally defensible and administratively successful M/WBE Program cannot be implemented without additional resources. It is important that other City departments' responsibilities for meeting the M/WBE Program objectives are increased and re-emphasized. M/WBE participation in City of Austin contracting will be less successful if it is seen as "the M/WBE Program," rather than as a City-wide initiative for which all department heads will be held responsible. Job descriptions should reflect this priority, with meeting M/WBE Program objectives one evaluation criterion for raises and promotions.

As the current ordinance reflects, SMBR should continue to have sole responsibility for the operation and administration of the City's M/WBE Program. SMBR plays a vital role in policy development and community outreach and involvement that will hopefully continue to grow and expand. SMBR's collaboration with the various stakeholder and advocacy groups is essential to an effective outreach program and should continue.

7. Review Sanctions Policy

The ordinance section on the imposition and progression of sanctions is ambiguous and should be revisited. There should be no confusion about the application of sanctions in the contracting community and the imposition of sanctions for violating the program regulations becomes even more difficult in light of the uncertainty surrounding the appropriateness of progressive sanctions.

The City of Austin should track and impose sanctions as appropriate on firms that continually violate not only the letter of the regulations but the spirit as well of the program.

8. Continue the M/WBE Program Sunset Review Process

The City of Austin should continue to require that the evidentiary basis for the Program be reviewed every five years, and that it should be continued only if there is strong evidence that discrimination continues to disadvantage M/WBEs in the relevant market area. The Program's goals and operations should be included as part of the review in order to ensure that they remain narrowly tailored to current evidence. The practice of setting a sunset date for the ordinance, when the Program will end unless reauthorized, should continue.

References

- Acs, Z. and D. Evans (1994), "The determinants of variations in self-employment rates across countries and over time," Working Paper.
- Alba-Ramirez, A. (1994), "Self-employment in the midst of unemployment; the case of Spain and the United States," Applied Economics, 2, 189-204.
- Arai, A. B. (1997), "The road not taken, The transition from unemployment to self-employment in Canada, 1961-1994," Canadian Journal of Sociology, 22, Summer, 365-382.
- Areeda, P., L. Kaplow and A. Edlin (2004), Antitrust Analysis: Problems, Text, Cases, New York: Aspen Publishers, 6th ed.
- Aronson, R. L. (1991), Self-employment, ILR Press, Ithaca, NY, ILR Press.
- Bates, T. (1973), Black capitalism, a quantitative analysis, New York, Praeger.
- Bates, T. (1989), "The changing nature of minority business, a comparative analysis of Asian, non-minority, and black-owned businesses," The Review of Black Political Economy, 25-42.
- Bates, T. (1991a), "Discrimination and the capacity of Chicago metropolitan area minority and women-owned businesses," Report to the City of Chicago Department of Law.
- Bates, T. (1991b), "Commercial bank financing of white- and black-owned small business startups," Quarterly Review of Economics and Business, 31(1), 64-80.
- Bates, T. (1993), "Banking on black enterprise, the potential of emerging firms for revitalizing urban economies," Washington, DC, Joint Center for Political and Economic Studies.
- Bates, T. and A. Robb (2013) "Greater Access to Capital Is Needed to Unleash the Local Economic Development Potential of Minority-Owned Businesses," Economic Development Quarterly, 27(3), pp. 250-259.
- Bauer, P. W. and B. A. Cromwell (1994), "A Monte Carlo examination of bias tests in mortgage lending," Federal Reserve Bank of Cleveland Economic Review, 30(3), 27-40.
- Becker, G. S. (1957), The economics of discrimination, University of Chicago Press, Chicago, Illinois.
- Bernhardt, I. (1994), "Comparative advantage in self-employment and paid work," Canadian Journal of Economics, May, 273-289.
- Black, J., D. de Meza and D. Jeffreys (1996), "House price, the supply of collateral and the enterprise economy," The Economic Journal, 106(434), January, 60-75.

- Blanchard, L., Zhao, B. and J. Yinger (2005) "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs?" Center for Policy Research Working Paper No. 74, Syracuse University, Maxwell School of Citizenship and Public Affairs, December.
- Blanchflower, D. G. (2000), "Self-employment in OECD countries," Labour Economics, 7, September, 471-505.
- Blanchflower, D. G. (2009), "Minority self-employment in the United States and the impact of affirmative action programs," Annals of Finance, (5)3-4, 361-396.
- Blanchflower, D. G., P. Levine and D. Zimmerman (2003), "Discrimination In The Small Business Credit Market," Review of Economics and Statistics, 85(4), 930-943.
- Blanchflower, D. G. and B. Meyer (1994), "A longitudinal analysis of the young self-employed in Australia and the United States," Small Business Economics, 6, 1-20.
- Blanchflower, D. G. and A. J. Oswald (1990), "Self-employment and the enterprise culture," British Social Attitudes: The 1990 Report, edited by R. Jowell, S. Witherspoon and L. Brook, Aldershot: Gower.
- Blanchflower, D. G. and A. J. Oswald (1998), "What makes an entrepreneur?," Journal of Labor Economics, 16(1), January, 26-60.
- Blanchflower, D. G. and A. J. Oswald (2008), "What makes a young entrepreneur?," International Handbook on Youth and Young Adulthood, edited by Andy Furlong, in the Routledge International Handbook series.
- Blanchflower, D. G., A. J. Oswald and A. Stutzer (2001), "Latent entrepreneurship across nations," European Economic Review, 45, no. 4-6, May, 680-691.
- Blanchflower, D. G. and C. Shadforth (2007), "Entrepreneurship in the UK," Foundations and Trends in Entrepreneurship, 3(4), 257-364.
- Blanchflower, D. G. and J. S. Wainwright (2005), "An Analysis of the Impact of Affirmative Action Programs on Self-Employment in the Construction Industry," National Bureau of Economic Research Working Paper Series, #11793, November.
- Blau, D. (1987), "A time-series analysis of self-employment in the United States," Journal of Political Economy, 95, 445-467.
- Bogenhold, D. and U. Staber (1991), "The decline and rise of self-employment," Employment and Society, 5, 223-239.
- Borjas, G. J. and S. Bronars (1989), "Consumer discrimination and self-employment," Journal of Political Economy, 97, 581-605.
- Bourdon, C. C. and R. E. Levitt (1980), Union and open-shop construction, compensation, work practices, and labor markets, Lexington, MA: Lexington Books.

- Broussard, N., R. Chami and G. Hess (2003), “(Why) do self-employed parents have more children?,” Working Paper, September.
- Browne, L. E. and G. M. B. Tootell (1995), “Mortgage Lending in Boston-A Response to the Critics,” New England Economic Review, September-October, 53-78.
- Cagetti, M. and M. DeNardi (2006), “Entrepreneurship, frictions and wealth,” Journal of Political Economy, 114(5), 835-70.
- Cavalluzzo, K. S. and L. C. Cavalluzzo (1998), “Market structure and discrimination, the case of small businesses,” Journal of Money, Credit, and Banking, 30(4), November, 771-792.
- Cavalluzzo, K. S., L. C. Cavalluzzo and J. Wolken (2002), “Competition, small business financing, and discrimination, evidence from a new survey,” The Journal of Business, 75(4), 641-681.
- Cloud, C. and G. Galster (1993), “What do we know about racial discrimination in mortgage markets,” Review of Black Political Economy, 22(1), Summer, 101-120.
- Coate, S. and S. Tennyson (1992), “Labor market discrimination, imperfect information and self-employment,” Oxford Economic Papers, 44, 272-288.
- Cole, R. A. (1998), “Availability of credit to small and minority-owned businesses, evidence from the 1993 National Survey of Small Business Finances,” unpublished manuscript, Employment Policies Institute, Washington, DC, April 13.
- Cowling, M. and P. Mitchell (1997), “The evolution of UK self-employment, A study of government policy and the role of the macroeconomy,” Manchester School of Economic and Social Studies, 65, no. 4, September, 427-442.
- Day, T. S. and S. J. Liebowitz (1998), “Mortgage lending to minorities, where’s the bias?,” Economic Inquiry, XXXVI, January, 3-28.
- DeWit, G. and F. A. Van Winden (1990), “An empirical analysis of self-employment in the Netherlands,” Economics Letters, 32, 97-100.
- Dunn, T. A. and D. J. Holtz-Eakin (2000), “Financial capital, human capital, and the transition to self-employment: evidence from intergenerational links,” Journal of Labor Economics, 18 (2): 282-305.
- Eccles, R. G. (1981), “Bureaucratic versus craft administration: The relationship of market structure to the construction firm,” Administrative Science Quarterly, 26, 449-469.
- Enchautegui, Maria E., M. Fix, P. Loprest, S. von der Lippe and D. Wissoker (1996), Do minority-owned businesses get a fair share of government contracts?, Washington, DC: The Urban Institute.

- Evans, D. and B. Jovanovic (1989), "An estimated model of entrepreneurial choice under liquidity constraints," Journal of Political Economy, 97, 808-827.
- Evans, D. and L. Leighton (1989), "Some empirical aspects of entrepreneurship," American Economic Review, 79, 519-535.
- Executive Office of the President, Office of Management and Budget (2012), North American Industrial Classification System: United States, 2012, Lanham, MD: Bernan.
- Fairlie, R. W. (1999), "The absence of the African American owned business, an analysis of the dynamics of self-employment," Journal of Labor Economics, 17(1), 80-108.
- Fairlie, R. W. (2006), "Entrepreneurship among Disadvantaged Groups: An Analysis of the Dynamics of Self-Employment by Gender, Race and Education," Handbook of Entrepreneurship, Volume 2, eds. Simon C. Parker, Zoltan J. Acs and David R. Audretsch, New York: Springer Verlag.
- Fairlie R. W. and B. D. Meyer (1996), "Ethnic and Racial Self-Employment Differences and Possible Explanations," Journal of Human Resources, 31(4), 757-793.
- Fairlie R. W. and B. D. Meyer (1998), "Does immigration hurt Black self-employment?," Help or Hindrance? The Economic Implications of Immigration for Blacks, edited by D. S. Hamermesh and F. D. Bean, New York, Russell Sage Foundation.
- Fairlie R. W. and B. D. Meyer (2003), "The effect of immigration on native self-employment," Journal of Labor Economics, 21(3), 619-650.
- Fairlie, R. W. and B. D. Meyer (2000), "Trends in self-employment among white and black men during the twentieth century," Journal of Human Resources, XXXV(4), 643-669.
- Fairlie, R. W. and H. A. Krashinsky (2006), "Liquidity constraints, household wealth and entrepreneurship revisited," Working Paper, University of California, Santa Cruz.
- Fairlie, R. W. and A. Robb (2007a), "Why are black-owned businesses less successful than white-owned businesses? The role of families, inheritances, and business human capital," Journal of Labor Economics, 25(2), 289-323.
- Fairlie, R. W. and A. Robb (2007b) "Families, human capital, and small business: evidence from the Characteristics of Business Owners Survey," Industrial and Labor Relations Review, 60(2), 225-245.
- Fairlie, R. W. and A. Robb (2010) "Disparities in Capital Access between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs," for Minority Business Development Agency, January.
- Ferri, G. and P. Simon (1997), "Constrained consumer lending, exploring business cycle patterns using the Survey of Consumer Finances," Working Paper, Princeton University.

- Foti, A. and M. Vivarelli (1994), "An econometric test of the self-employment model - the case of Italy," Small Business Economics, 6, no. 2, April, 81-93.
- Fuchs, V. (1982), "Self-employment and labor force participation of older males," Journal of Human Resources, 17, Fall, 339-357.
- Gould, F. E. (1980), "Investigation in construction entrepreneurship," Masters Thesis, MIT, May.
- Greene, W. H. (1997), Econometric Analysis, Third Edition, New Jersey, Prentice-Hall, 926-931.
- Haggerty, C., K. Grigorian, R. Harter and J. D. Wolken (2000), "The 1998 Survey of Small Business Finances: Sampling and Level of Effort Associated with Gaining Cooperation from Minority-Owned Businesses," *Proceedings of the Second International Conference on Establishment Surveys*, Buffalo, NY, June 17-21.
- Hall, R. E. and F. Mishkin (1982), "The sensitivity of consumption to transitory income, estimates from panel data on households," Econometrica, 50(2), 461-81.
- Hamilton, D., A. Austin, and W. Darity Jr., "Whiter Jobs, Higher Wages, Occupational Segregation and the Lower Wages of Black Men," Economic Policy Institute Working Paper No. 28, February 28, 2011, <http://s1.epi.org/files/page/-/BriefingPaper288.pdf>.
- Harrison, G. W. (1998), "Mortgage lending in Boston, a reconsideration of the evidence," Economic Inquiry, XXXVI, January, 29-38.
- Hayashi, F. (1985), "The effect of liquidity constraints on consumption, a cross-sectional analysis," Quarterly Journal of Economics, 100(1), February, 183-206.
- Heckman, J. J. (1998), "Detecting discrimination," Journal of Economic Perspectives, 12(2), Spring, 101-116.
- Holmes T. J. and J. A. Schmitz (1990), "A theory of entrepreneurship and its application to the study of business transfers," Journal of Political Economy, 89, 265-294.
- Holtz-Eakin, D., D. Joulfaian and R. S. Harvey (1994a), "Entrepreneurial decisions and liquidity constraints," Journal of Political Economy, 102, 53-75.
- Holtz-Eakin, D., D. Joulfaian and R. S. Harvey, (1994b), "Sticking it out, entrepreneurial survival and liquidity constraints," Rand Journal of Economics, 25(2), Summer, 334-347.
- Horne, D. (1994), "Evaluating the role of race in mortgage lending," FDIC Banking Review, 7(1), Spring/Summer, 1-15.
- Hout, M. and H. Rosen (2000), "Self-Employment, family background, and race," Journal of Human Resources, 35, no. 4, Fall, 670-92.

- Hurst, E. and A. Lusardi (2004), "Liquidity Constraints, Household Wealth, and Entrepreneurship," Journal of Political Economy, Vol. 112(2), April, 319-347.
- Jappelli, J. (1990), "Who is credit constrained in the U.S. economy?," Quarterly Journal of Economics, 105(1), February, 219-234.
- Kanbur, S. M. R. (1990), "Entrepreneurial risk taking, inequality, and public policy, an application of inequality decomposition analysis to the general equilibrium effects of progressive taxation," Journal of Political Economy, 90, 1-21.
- Kidd, M. (1993), "Immigrant wage differentials and the role of self-employment in Australia," Australian Economic Papers, 32, no. 60, June, 92-115.
- Kihlstrom, R. E. and J. J. Laffont (1979), "A general equilibrium entrepreneurial theory of firm formation based on risk aversion," Journal of Political Economy, 87, 719-848.
- Kuhn, P. J. and H. J. Schuetze (1998), "The dynamics of self-employment in Canada," Working Paper, McMaster University.
- Kymn, C. (2014). "Access to Capital for Women- and Minority-owned Businesses: Revisiting Key Variables," SBA Office of Advocacy Issue Brief, No. 3, January.
- La Noue, G. (2006), "Remarks of George LaNoue," in Disparity Studies as Evidence of Discrimination in Federal Contracting, U.S. Commission on Civil Rights, Washington, DC.
- Ladd, H. F. (1998), "Evidence on discrimination in mortgage lending," Journal of Economic Perspectives, 12(2), Spring, 41-62.
- LaFerrere, A. and P. McEntee (1995), "Self-employment and intergenerational transfers of physical and human capital, An empirical analysis of French data," Economic and Social Review, 27, no. 1, October, 43-54.
- Lentz, B. F. and D. N. Laband (1990), "Entrepreneurial success and occupational inheritance among proprietors," Canadian Journal of Economics, 23, 563-579.
- Lindh, T. and H. Ohlsson (1996), "Self-employment and windfall gains, Evidence from the Swedish lottery," Economic Journal, 106(439), November, 1515-1526.
- Long, J. E. (1982), "The income tax and self-employment," National Tax Journal, 35, March, 31-42.
- Mach, T. L. and J. D. Wolken (2006), "Financial services used by small businesses: evidence from the 2003 Survey of Small Business Finances," Federal Reserve Bulletin, October 2006.
- Maddala, G.S. (1983). Limited Dependent and Qualitative Variables in Econometrics, Cambridge: Cambridge University Press.

Mayor's Advisory Council on Minority and Women-Owned Business Enterprises (2013). *A New Day A Better Way: Rebuilding A Stronger Baltimore Through Economic Inclusion*.

Meager, N. (1992), "Does unemployment lead to self-employment?," Small Business Economics, 4, 87-103.

Mora, M. T. and A. Dávila (2006), "Mexican immigrant self-employment along the U.S.-Mexico border: an analysis of 2000 Census data," Social Science Quarterly, 87(1), 91-109.

Munnell, A., G. M. B. Tootell, L. E. Browne and J. McEneaney (1996), "Mortgage lending in Boston, interpreting HMDA data," American Economic Review, March, 86(1), 25-53.

Myrdal, G. (1944), An American dilemma, the negro problem and modern democracy, Volume 1, New York, Harper & Row.

National Opinion Research Center (2005). "The 2003 Survey of Small Business Finances Methodology Report," mimeo,
<http://www.federalreserve.gov/pubs/oss/oss3/ssbf03/ssbf03home.html#ssbf03results>.

NERA Economic Consulting (2008). *Race, Sex, and Business Enterprise: Evidence from the City of Austin*.

Oaxaca, R. L. (1973), "Male-female wage differences in urban labor markets," International Economic Review, 14(3), October, 693-709.

Olson, P. D., V. S. Zuiker and C. P. Montalto (2000), "Self-employed Hispanics and Hispanic wage earners: differences in earnings," Hispanic Journal of Behavioral Sciences, 22, 114-130.

Parker, S. C. (2004), The Economics of Self-Employment and Entrepreneurship, Cambridge: Cambridge University Press.

Pickles, A. R. and P. N. O'Farrell (1987), "An analysis of entrepreneurial behavior from male work histories," Regional Studies, 21, 425-444.

Pitts, S. (2007). "Bad Jobs: the Overlooked Crisis in the Black Community," *New Labor Forum*, 16, no. 1: 39-47 (Winter).

Quinn, J. F. (1980), "Labor force participation patterns of older self-employed workers," Social Security Bulletin, 43, 17-28.

Reardon, E. (1998), "Are the self-employed misfits or superstars?," Working Paper, Rand Corporation.

Rees, H. and A. Shah (1986), "An empirical analysis of self-employment in the UK," Journal of Applied Econometrics, 1, 95-108.

Robb, A. (2012). "Access to Capital among Young Firms, Minority-owned Firms, Women-owned Firms, and High-tech Firms," for SBA Office of Advocacy, April.

- Robb, A. (2010). "Beyond the Late, Lamented Survey of Small Business Finances," Newsletter of the Association of Public Data Users, 33, no. 2, March/April.
- Robles, B. J. and H. Cordero-Guzmán (2007), "Latino self-employment and entrepreneurship in the United States: an overview of the literature and data sources," The Annals of the American Academy of Political and Social Science, 613; 18-31.
- Robson, M. T. (1998a), "The rise in self-employment amongst UK males," Small Business Economics, 10, no. 3, 199-212.
- Robson, M. T. (1998b), "Self-employment in the UK regions," Applied Economics, 30, no. 3, March, 313-322.
- Ruetschlin, C. and D. Asante-Muhammad (2015). The Retail Race Divide: How the Retail Industry Is Perpetuating Racial Inequality in the 21st Century, www.demos.org.
- Schuetze, H. J. (1998), "Taxes, economic conditions and recent trends in male self-employment: a Canada-U.S. comparison," Working Paper, McMaster University, Hamilton, Ontario, Canada.
- Taylor, M. P. (1996), "Earnings, independence or unemployment; why become self-employed?," Oxford Bulletin of Economics and Statistics, 58, 2, 253-265.
- Tootell, G. M. B. (1996), "Turning a critical eye on the critics," Mortgage lending, racial discrimination and federal policy, edited by J. Goering and R. Wienk, Urban Institute Press, Washington, DC.
- U.S. Chamber of Commerce (2005), Access to capital, what funding sources work for you?, U.S. Chamber of Commerce, Washington, DC.
- Lichtenstein, Jules (2013). "Profile of Veteran Business Owners: More Young Veterans Appear To Be Starting Businesses," U.S. Small Business Administration, Office of Advocacy: Issue Brief. No. 1 (November 13).
- Yezer, M. J., R. F. Phillips and R. P. Trost (1994), "Bias in estimates of discrimination and default in mortgage lending; the effects of simultaneity and self-selection," Journal of Real Estate Finance and Economics, 9(3), 196-215.
- Wainwright, J. and C. Holt (2010), Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program, Transportation Research Board of the National Academies, NCHRP Report, Issue No. 644.
- Wainwright, J. (2012), Report of Defendant Intervenor's Expert in Geyer Signal, Inc. and Kevin Kissell v. Minnesota Department of Transportation, Thomas K. Sorel in his capacity as the Minnesota Commissioner of Transportation, and Mary Prescott in her capacity as Acting Director of the Office of Civil Rights, United States District Court for the District of Minnesota, Case No. 0:11-cv-00321-JRT, December 30.

Wainwright, J. S. (2010), Report of Defendant's Expert in *Kevcon, Inc. v. The United States*, No. 09 625, United States Court of Federal Claims, April 29.

Wainwright, J. S. (2008), "Discrimination Facing Small Minority-Owned and Women-Owned Businesses in Commercial Credit Markets," Testimony before the United States Senate, Committee on Small Business and Entrepreneurship, Hearing on "Business Start-up Hurdles in Underserved Communities: Access to Venture Capital and Entrepreneurship Training," September 11.

Wainwright, J. S. (2000), Racial discrimination and minority business enterprise, evidence from the 1990 Census, *Studies in Entrepreneurship Series*, edited by S. Bruchey, New York, Garland Publishing.

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Appendix A. Glossary

ACS. *The American Community Survey.* The Census Bureau's ACS is an ongoing survey covering the same type of information collected in the decennial census. The ACS is sent to approximately 3 million addresses annually, including housing units in all counties in the 50 states and the District of Columbia.

African American: African American or “Black” refers to an individual having origins in any of the Black racial groups of Africa.

Aggregation, aggregated: Refers to the practice of combining smaller groups into larger groups. In the present context, this term is typically used in reference to the presentation of utilization, availability, or related statistics according to industry. For example, statistics presented for the “Construction” sector as a whole are more aggregated than separate statistics for “Building Construction,” “Heavy Construction,” and “Special Trades Construction” industries. *See also* “Disaggregation, disaggregated.”

Anecdotal evidence: Qualitative data regarding business owners' accounts of experiences with disparate treatment and other barriers to business success.

Asian or Asian/Pacific Islander: Refers to an individual having origins in the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islanders (except Native Hawaiians).

Availability: A term of art in disparity studies that refers to the percentage of a given population of businesses owned by one or more groups of interest. *See also* “Utilization,” “Disparity Ratio.”

Baseline Business Universe: The underlying population of business establishments that is used in an availability analysis. It is used as the denominator in an M/WBE availability measure.

Black: Or “African American” refers to an individual having origins in any of the Black racial groups of Africa.

Capacity: This term has no single definition. *See* Chapter III for discussion of this concept and its role in disparity studies.

Constitutional significance or substantive significance: An indication of how large or small a given disparity is. Under the EEOC's “four-fifths” rule, a disparity ratio is substantively significant if it is 0.8 or less on a scale of 0 to 1 or 80 or less on a scale of 1 to 100.

Decennial: Refers to the census conducted every decade by the U.S. Census Bureau. The last decennial census was conducted in 2010.

Demand-side: Refers to activity on the demand-side of an economic market. For example, when public agencies hire contractors or vendors they are creating market demand. *See also* “Supply-side.”

Dependent variable: In a regression analysis, a variable whose value is postulated to be influenced by one or more other “independent” or “exogenous” or “explanatory” variables. For example, in business owner earnings regressions, business owner earnings is the dependent variable, and other variables, such as industry, geographic location, or age, are the explanatory variables. *See also* “Independent variable,” “Exogenous variable.”

Disaggregation, disaggregated: Refers to the practice of splitting larger groups into smaller groups. In the present context, this term is typically used in reference to the presentation of utilization, availability, or related statistics according to industry. For example, statistics presented for “Building Construction,” “Heavy Construction,” and “Special Trades Construction” industries are more disaggregated than statistics for the “Construction” sector as a whole.

Disparate impact: A synonym for “disparity,” often used in the employment discrimination litigation context. A disparate impact occurs when a “good” outcome for a given group occurs significantly less often than expected given that group’s relative size, or when a “bad” outcome occurs significantly more often than expected.

Disparity ratio (or Disparity index): A measure derived from dividing utilization by availability and multiplying the result by 100. A disparity ratio of less than 100 indicates that utilization is less than availability. A disparity ratio of 80 or less can be taken as evidence of disparate impact. *See also* “Availability,” “Constitutional significance,” “Utilization.”

Distribution. A set of numbers and their frequency of occurrence collected from measurements over a statistical population.

Econometrics, econometrically: Econometrics is the field of economics that concerns itself with the application of statistical inference to the empirical measurement of relationships postulated by economic theory. *See also* “Regression.”

Endogenous variable: A variable that is correlated with the residual in a regression analysis or equation. Endogenous variables should not be used in statistical tests for the presence of disparities. *See also* “Exogenous variable.”

Exogenous variable: A variable that is uncorrelated with the residual in a regression analysis or equation. Exogenous variables are appropriate for use in statistical tests for the presence of disparities. *See also* “Endogenous variable,” “Independent variable,” “Dependent variable.”

Hispanic: Refers to an individual of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

Independent variable: In a regression analysis, one or more variables that are postulated to influence or explain the value of another, “dependent” variable. For example, in business owner earnings regressions, business owner earnings is the dependent variable, and other variables, such as industry, geographic location, or age, are the independent or explanatory variables. *See also* “Dependent variable,” “Exogenous variable.”

MBE: Minority-Owned Business Enterprise. A business establishment that is 51 percent or more owned and controlled by racial or ethnic minorities (*i.e.*, African Americans, Hispanics, Asians/Pacific Islanders or Native Americans).

Mean: A term of art in statistics, synonymous in this context with the arithmetic average. For example, the mean value of the series 1, 1, 2, 2, 2, 4, 5 is 2.43. This is derived by calculating the sum of all the values in the series (*i.e.*, 17) and dividing that sum by the number of elements in the series (*i.e.*, 7).

Median: A term of art in statistics, meaning the middle value of a series of numbers. For example, the median value of the series 1, 1, 2, 2, 2, 4, 5 is 2.

Microdata or micro-level data: Quantitative data rendered at the level of the individual person or business, as opposed to data rendered for groups or aggregates of individuals or businesses. For example, Dun and Bradstreet provides micro-level data on business establishments. The Census Bureau's *Survey of Business Owners*, provides grouped or aggregated data on businesses.

Misclassification: In the present context, this term refers to a situation when a listing or directory of minority-owned or women-owned firms has incorrectly classified a firm's race or gender status. For example, when a firm listed as Hispanic-owned is actually African American-owned, or when a firm listed as nonminority female-owned is actually nonminority male-owned. *See also* "Nonclassification."

MSA: Metropolitan Statistical Area. As defined by the Federal Office of Management and Budget, contains at least one urbanized area that has a total population of 50,000 or more, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

NAICS: North American Industry Classification System. The standard system for classifying industry-based data in the U.S. Superseded the Standard Industrial Classification (SIC) System in 1997. *See also* "SIC."

Nonclassification: In the present context, this term refers to a type of misclassification when a listing or directory has not identified firms as minority-owned or women-owned when, in fact, they are. *See also* "Misclassification."

NSSBF or SSBF. The *Survey of Small Business Finances*, formerly the *National Survey of Small Business Finances*, was produced jointly by the Federal Reserve Board and the U.S. Small Business Administration to provide a periodic statistical picture of small business finances. The SSBF was discontinued after 2003.

Native American: Refers to an individual having origins in any of the original peoples of North America, including Native Hawaiians.

Nonminority: Firms that are not M/WBEs, *i.e.*, not owned by African Americans, Hispanics, Asians/Pacific Islanders, Native Americans or nonminority females.

PUMS: Public Use Microdata Sample. Both the decennial census and the American Community Survey publish PUMS products.

p-value: A standard measure used to represent the level of statistical significance. It states the numerical probability that the stated relationship is due to chance alone. For example, a p-value of 0.05 or 5 percent indicates that the chance a given statistical difference is due purely to chance is 1-in-20. *See also* “Statistical Significance.”

Regression, multiple regression, multivariate regression: A type of statistical analysis which examines the correlation between two variables (“regression”) or three or more variables (“multiple regression” or “multivariate regression”) in a mathematical model by determining the line of best fit through a series of data points. Econometric research typically employs regression analysis. *See also* “Econometrics.”

SBO: The Census Bureau’s *Survey of Business Owners* statistical data series is devoted to capturing statistical information on the nation’s minority-owned and women-owned business enterprises. Part of the five-year *Economic Census* series.

SDVOB. Service-Disabled Veteran-Owned Business Enterprise. A business establishment that is 51 percent or more owned and controlled by service-disabled veterans. *See also* VOB.

Service-Disabled Veteran. A veteran with a disability that is connected to their military service.

SIC: Standard Industrial Classification system. Prior to 1997, the standard system for classifying industry-based data in the U.S. Superseded by the North American Industry Classification System (NAICS). *See also* “NAICS.”

Statistical significance: A statistical outcome or result that is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone. *See also* “p-value.”

SSBF. *See* NSSBF.

Stratified: In the present context, this refers to a statistical practice where random samples are drawn within different categories or “strata” such as time period, industry sector, or M/WBE status.

Substantive significance or constitutional significance: An indication of how large or small a given disparity is. Under the EEOC’s “four-fifths” rule, a disparity ratio is substantively significant if it is 0.8 or less on a scale of 0 to 1.

Supply-side: Refers to activity on the supply-side of an economic market. For example, when new businesses are formed, other things equal, the supply of contractors to the market is increased. *See also* “Demand-side.”

t-test, t-statistic, t-distribution: Often employed in disparity studies to determine the statistical significance of a particular disparity statistic. A t-test is a statistical hypothesis test based on a

test statistic whose sampling distribution is a t-distribution. Various t-tests, strictly speaking, are aimed at testing hypotheses about populations with normal probability distributions. However, statistical research has shown that t-tests often provide quite adequate results for non-normally distributed populations as well.

Two-tailed (or two-sided) statistical test: A “two-tailed” test means that one is testing the hypothesis that two values, say u (utilization) and a (availability), are equal against the alternate hypothesis that u is not equal to a . In contrast, a one-sided test means that you are testing the hypothesis that u and a are equal against the alternate hypothesis u is not equal to a in only one direction. That is, that it is either larger than a or smaller than a .

Utilization: A term of art in disparity studies that refers to the percentage of a given amount of contracting and/or procurement dollars that is awarded or paid to businesses owned by one or more groups of interest. *See also* “Availability,” “Disparity Ratio.”

VOB: Veteran-Owned Business Enterprise. A business establishment that is 51 percent or more owned and controlled by veterans. *See also* SDVOB.

WBE: Women-Owned Business Enterprise: A business establishment that is 51 percent or more owned and controlled by nonminority women. In this Study, unless otherwise indicated, WBE refers to nonminority women-owned firms.

WSC: Refers to the West South Central census division in the NSSBF and SSBF data sets. The WSC includes the states of Texas, Arkansas, Louisiana and Oklahoma.

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Appendix B. Legal Standards for Government Race- and Gender-Conscious Contracting Programs

A. Overview of Strict Scrutiny

The applicable framework that establishes the legal standards governing race and gender conscious contracting programs is articulated in two seminal Supreme Court cases. In *City of Richmond v. J.A. Croson Company*²⁶³ and *Adarand Constructors, Inc. v. Peña*,²⁶⁴ the Supreme Court articulated that strict scrutiny would be the standard by which federal courts would review federal, state and local programs. Rather than permit generalized allegations of discrimination against minorities, the Supreme Court held that governments may adopt race-conscious programs only as a narrowly tailored remedy for a compelling interest of identified discrimination.²⁶⁵

1. Strict Scrutiny and *City of Richmond v. J.A. Croson Company*

The landmark case establishing that state and local government programs using race as a consideration must pass strict scrutiny is *Croson*. The strict scrutiny standard is comprised of two parts: (i) public entities must show a compelling state interest in establishing race or ethnicity specific programs, and (ii) such programs must be narrowly tailored to achieve that state interest. The strict scrutiny test calls for a “searching judicial inquiry into the justification,” to determine whether the classifications are truly remedial or rather “motivated by illegitimate notions of racial inferiority or simple racial politics.”²⁶⁶

In *Croson*, the Supreme Court struck down the City of Richmond’s Minority Business Enterprise Plan, which required prime contractors that were awarded city construction contracts to subcontract at least 30 percent of the project to minority-owned business enterprises (MBEs). The Supreme Court affirmed the Court of Appeals’ ruling that the plan was unconstitutional, finding that the City of Richmond had not presented sufficient evidence to support its compelling interest in remedying discrimination.

With respect to the first prong of the strict scrutiny standard, the Court emphasized that in order to establish a compelling interest, there must be “a strong basis in evidence” for the use of race conscious measures.²⁶⁷ The Court also stated that “findings of societal discrimination will not suffice” to meet the requirements of the Equal Protection Clause of the Fourteenth

²⁶³ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

²⁶⁴ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995) (“*Adarand III*”).

²⁶⁵ This legal analysis is not an exhaustive discussion of all the case law or issues related to *Croson* and its progeny but rather highlights, with particular emphasis on the guidance from the Fifth Circuit, the major trends and status of the case law discussing the use of race and gender conscious measures in government contracting.

²⁶⁶ *Croson*, 488 U.S. at 493. The Fifth Circuit Court of Appeals in *Fisher v. University of Texas*, 758 F.3d 633 (5th Cir. 2014) applied the strict scrutiny standard to the race conscious admissions program at the University of Texas. The Fifth Circuit wrote: “racial classifications are constitutional only if they are narrowly tailored to further compelling government interest.” *Id.* at 642.

²⁶⁷ *Id.* at 500 (citing *Wygant*, 476 U.S. at 277 (1986)).

Amendment.²⁶⁸ In *Croson*, the Supreme Court opined that “there was no direct evidence of race discrimination on the part of the City” or “any evidence that the City’s prime contractors had discriminated against minority-owned subcontractors.”²⁶⁹ The Supreme Court rejected all five of the predicate facts which the District Court relied on to uphold the City of Richmond’s 30 percent quota.

Specifically, the Supreme Court reasoned that the predicate facts—the City’s declaration that the ordinance was remedial, generalized assertions of past discrimination in the construction industry, the paucity of minority contractors in state and local trade associations and Congress’ findings of the effects of past discrimination—did not singly or together provide a strong basis in evidence to justify race conscious measures. Finally, the City of Richmond’s statistical evidence showed a statistical disparity between the *general population* in Richmond (which was 50 percent African American) and the awards of prime contracts to African American firms (0.67 percent of the awards). The Supreme Court held that this was an irrelevant statistical comparison and insufficient to raise an inference of discrimination.²⁷⁰ Therefore, the City had failed to establish that it had a strong basis in evidence to support a compelling interest for its use of race-conscious remedies.

However, to avoid its holding from being construed to categorically eliminate all race-conscious efforts, the Court expressly stated that:

“Nothing we say today precludes a state or local entity from taking action to rectify the effects of identified discrimination within its jurisdiction. If the city of Richmond had evidence before it that nonminority contractors were systematically excluding minority businesses from subcontracting opportunities it could take action to end the discriminatory exclusion. Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.... Moreover, evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”²⁷¹

In suggesting what kind of evidence would support a proper statistical comparison, Justice O’Connor stated that a more relevant statistical test would compare 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. This, to the

²⁶⁸ *Id.* at 494.

²⁶⁹ *Id.* at 480.

²⁷⁰ *Id.* at 499–500.

²⁷¹ *Id.* at 509.

Court, would support an inference of discrimination and thus satisfy the compelling interest requirement of the strict scrutiny test.²⁷²

With respect to the second prong, the *Croson* court ruled that the MBE program was not narrowly tailored to remedy discrimination, as the 30 percent quota could not be “tied to any injury suffered by anyone.”²⁷³ For example, the Court pointed to the fact that the program was extended to a long list of minorities, other than African Americans, such as Hispanics, Asians, American Indians, and Eskimos and Aleuts, for which the City had not established any inference of discrimination.²⁷⁴ Finally, the Court pointed to Richmond’s failure to consider race-neutral means to increase MBE participation.²⁷⁵ In analyzing if the remedy implemented by the local or state government actor is narrowly tailored, the *Croson* Court identified several factors:

- Consideration of alternative, race-neutral means to increase M/WBE participation;²⁷⁶
- The flexibility of the program requirements, including the availability of waiver provisions;²⁷⁷
- The duration of the proposed relief;²⁷⁸
- The relationship of numerical participation goals to the availability of M/WBEs in the relevant market;²⁷⁹
- The impact of the relief on third parties;²⁸⁰ and
- The overinclusiveness or underinclusiveness of the racial classifications.²⁸¹

All of the above factors should be considered when developing a race-based program to ensure that the program is sufficiently narrowly tailored under the strict scrutiny standard. Guidance from the courts relating to the above are further discussed in later sections of this Appendix.

²⁷² *Id.* at 503. The Fifth Circuit Court of Appeals in *W.H. Scott Construction Co., Inc. v. City of Jackson*, 199 F.3d 206, 218, n.11. (5th Cir. 1999), although rejecting defendant’s “belated reliance” on a previously unadopted disparity study that contained no data on the utilization of minority subcontractors, acknowledged that had the defendant relied on a more thorough disparity study, the “outcome today might be different.”

²⁷³ *Croson*, 488 U.S. at 508.

²⁷⁴ *Id.*

²⁷⁵ *Id.* at 506–507 (criticizing the City’s motive in establishing a 30 percent quota as a remedy for past discrimination and concluded that the goal of the program was racial balancing).

²⁷⁶ *Croson*, 488 U.S. at 507 (citing *United States v. Paradise*, 480 U.S. 149, 171 (1987)). *See also Adarand III*, 515 U.S. at 237-238.

²⁷⁷ *Paradise*, 480 U.S. at 171. *See also Adarand VII*, 228 F.3d at 1177.

²⁷⁸ *Croson*, 488 U.S. at 498, 509. *See also Paradise*, 480 U.S. at 171.

²⁷⁹ *Paradise*, 480 U.S. at 171.

²⁸⁰ *Id.*

²⁸¹ *Croson*, 488 U.S. at 506.

2. Intermediate Scrutiny

Since *Croson*, the U.S. Supreme Court has remained silent with respect to the appropriate standard of review for WBE programs. *Croson* was limited to the review of a race-conscious government contracting program. In other contexts, however, the Supreme Court has traditionally ruled that gender classifications are not subject to the rigorous strict scrutiny standard applied to racial classifications. Instead, gender classifications are subject to a lesser “intermediate” level of review.

Although the Supreme Court has not addressed the standard of review for gender based programs, a significant number of circuit courts of appeals have reviewed WBE programs using intermediate scrutiny, rather than the more exacting strict scrutiny standard of review.²⁸² The Fifth Circuit applies “intermediate scrutiny” and in *Scott* stated that “[b]ecause the parties focus our inquiry here on racial preferences, we will not address the analysis under intermediate scrutiny for sex based preferences.”²⁸³ In order to meet the burden of proof for an intermediate scrutiny standard of review, the state must show that the “classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.”²⁸⁴ Unlike the strong basis in evidence requirements for racial classifications, gender classifications “can rest safely on something less” than a strong basis in evidence.²⁸⁵

In defining what constitutes something less than a strong basis in evidence, the Fourth Circuit recently agreed that the state defending the statute must present probative evidence that the rationale for enacting a gender preference rests on evidence, *i.e.*, informed analysis and not stereotypical generalizations.²⁸⁶ Intermediate review requires the governmental entity to demonstrate an “important governmental objective” and a method for achieving this objective that bears a fair and substantial relation to the goal.²⁸⁷

The City of Austin, therefore, must meet the intermediate scrutiny standard for any gender conscious preferences in its contracting activities.

²⁸² See, e.g., *W.H. Scott Construction Co., Inc. v. City of Jackson*, 199 F.3d 206 (5th Cir. 1999); *H.B. Rowe, Inc. v. Tippet*, 615 F.3d 233 (4th Cir. 2010); *Associated Util. Contractors of Md., Inc. v. Mayor & City Council of Balt.*, 83 F. Supp. 2d 613, 620 (D. Md. 2000); *Eng’g Contractors Ass’n of S. Fla., Inc., v Metropolitan Dade Cnty.*, 122 F.3d 895 (11th Cir. 1997); *Contractors Ass’n of E. Penn. v. City of Phila.*, 91 F.3d 586 (3^d Cir. 1996); *Coral Constr. Co. v. King Cnty.*, 941 F.2d 910 (9th Cir. 1991). *But see Brunet v. City of Columbus*, 1 F.3d - 390, 404 (6th Cir. 1993) (gender based affirmative action plans subject to strict scrutiny).

²⁸³ *W.H. Scott*, 199 F.3d 206, at 215 n.9.

²⁸⁴ *Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982).

²⁸⁵ *H.B. Rowe*, 615 F.3d, at 242 (internal citations omitted).

²⁸⁶ *Id.*

²⁸⁷ *Id.*; See also *Craig v. Boren*, 429 U.S. 190, 198-99 (1976).

3. Rational Basis Test for Veteran and Service-Disabled Veteran Initiatives

In contrast to race-based or gender-based initiatives, preferences for VOBs or SDVOBs are subject only to a rational basis test, meaning that the government need only demonstrate that the law is related to a legitimate government purpose.²⁸⁸ A challenger to such a law would have the burden of proving that the policy “has no conceivable legitimate purpose or is not rationally related to it.”²⁸⁹

4. Strict Scrutiny and *Adarand Constructors, Inc. v. Peña*

While *Croson*’s holding applies to challenges to state and local government programs which classify based on race, *Adarand Constructors, Inc. v. Peña* extended *Croson*’s reach by holding that the strict scrutiny standard applies to federal programs using race-based classifications as well. Similar to the state and local government context, the federal government must also show a compelling interest for the use of race-conscious measures and the remedies used must be narrowly tailored to the compelling interest.

In *Adarand III*, a nonminority subcontractor that did not receive an award for the guardrail portion of a federal highway project brought an action against the Secretary of Transportation at the time, Federico Peña, alleging that the SBA 8(a) and 8(d) program preference for minorities violated the equal protection clause of the Fifth Amendment’s Due Process Clause.²⁹⁰ The prime contractor involved in this case had a clause in its contract with the government that it would receive a monetary incentive for hiring firms controlled by “socially and economically disadvantaged individuals” for its subcontracting work.²⁹¹ While the District Court ruled in favor of the federal government, and the Tenth Circuit Court of Appeals affirmed, the Supreme Court remanded the case to determine whether the challenged program met the strict scrutiny standard.

The Supreme Court noted that while *Croson* set strict scrutiny as the standard by which all race-based action by state and local governments would be analyzed, no such clear guidance was available in terms of what standard of review was required when such action was taken by the federal government. The Supreme Court ultimately concluded that strict scrutiny should also be applied to federal programs using race-conscious measures.²⁹²

In *Adarand Constructors, Inc. v. Slater*,²⁹³ a case that followed the original remand of the *Adarand* case, the Tenth Circuit Court of Appeals noted that the compelling interest prong of

²⁸⁸ See *Hooper, et al. v. Bernalillo County Assessor*, 472 U.S. 612 (1985).

²⁸⁹ Cornell Law School, Legal Information Institute, “Rational Basis Test,” available at http://www.law.cornell.edu/wex/rational_basis_test. Moreover, whereas M/WBE programs are constitutionally required to be remedial in nature in addressing the effects of race and gender discrimination, there is no such constitutional requirement that VOB and SDVOB initiatives be remedial in nature.

²⁹⁰ *Adarand III*, 515 U.S. at 209.

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000), *cert. granted*, 532 U.S. 941, *dismissed as improvidently granted*, 534 U.S. 103 (2001) (“*Adarand VII*”).

strict scrutiny has already been established by Congress. Acknowledging Congress's power to address racial discrimination in the states, the Court of Appeals held that "we readily conclude that the federal government has a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediation of the effects of past discrimination in the government contracting markets created by its disbursements."²⁹⁴ The Tenth Circuit Court of Appeals drew this conclusion from a portion of Justice O'Connor's opinion in *Croson*, where she stated that "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."²⁹⁵

5. Strict Scrutiny in the Fifth Circuit

There are a paucity of cases in the Fifth Circuit applying the *Croson* decision. A Fifth Circuit Court of Appeals decision that touched on strict scrutiny in government contracting is *W.H. Scott Construction Company v. City of Jackson*.²⁹⁶ W.H. Scott Construction Company ("Scott") challenged the constitutionality of the City of Jackson's MBE program ("the MBE program").²⁹⁷ Scott alleged that the City's MBE program violated the equal protection clause of the fourteenth amendment and therefore, was unconstitutional.²⁹⁸

In 1994, the City of Jackson retained a consultant to conduct a disparity study of the City's contracting activities. The disparity study concluded that the underutilization of African Americans and Asian Americans in City contracting was statistically significant.²⁹⁹ The study recommended that the City set goals in the various industry trades for MBEs at 10-15 percent, depending on the construction project.³⁰⁰ The City disagreed with the study's findings, however, and failed to adopt the study's conclusions. The City adopted an MBE goal of 15 percent, and began the process of selecting a new consultant to conduct a new disparity study.

In 1997, the City advertised a new construction project and set a 15 percent MBE participation goal on the project. Scott informed the Department of Public Works of the efforts to meet the subcontracting participation goals for the contract including copies of advertisements soliciting

²⁹⁴ *Id.* at 1165.

²⁹⁵ *Croson*, 488 U.S. at 492. Several recent United States District Court opinions in the District of Columbia, the Northern District of Illinois, and the District of Minnesota have upheld the constitutionality of federal race-conscious contracting policies against both facial and as applied challenges. *See Rothe Development Inc., v. Department of Defense, et al.*, CA. 12-cv-0744(KBJ), 2015 U.S. Dist. LEXIS 72925 (D.D.C. 2015) (upholding constitutionality of Section 8(a) of the Small Business Act on a facial challenge); *Midwest Fence Corp., v. United States Department of Transportation, et al.*, CA. 10-C-5627, U.S. Dist. Lexis 36277 (N.D. Ill. 2014) (upholding constitutionality of the DBE program on a facial and as applied challenge); *Geyer Signal et al., v. Minnesota Department of Transportation et al.*, CA. 11-321, 2014 U.S. Dist. LEXIS 43945 (D. Minn. 2014) (upholding constitutionality of the DBE program on an as implemented challenge).

²⁹⁶ *W.H. Scott Construction Co., Inc. v. City of Jackson*, 199 F.3d. 206 (5th Cir. 1999).

²⁹⁷ *Id.* at 236.

²⁹⁸ *Id.*

²⁹⁹ *Id.* at 210.

³⁰⁰ *Id.*

bids from M/WBE firms. Scott also informed the Department that the MBE subcontractors that the firm solicited were not the low bidders on the various scopes of work.³⁰¹ Scott Construction proposed WBE participation was 11.5 percent and the DBE participation was 1 percent.³⁰² The Department suggested that Scott increase the MBE participation rate by utilizing a minority vendor for supplies.³⁰³

The Department drafted a memorandum to the Mayor recommending that Scott be awarded the project despite the contractor's failure to meet the MBE goal. The memorandum also noted that Scott's bid exceeded the established budget by \$33,600 and that the DBE participation rate was only 1 percent. Scott subsequently informed the Department that it would not utilize a minority vendor to purchase project supplies. The Department, Mayor, and both the finance and legal departments recommended that Scott be awarded the contract and the matter was placed on the City Council agenda for consideration.³⁰⁴

The City Council voted to reject Scott's bid without comment. The City Council voted along racial lines with all five African American Council members voting to reject the bid and all four nonminority Council members voting to award the project to Scott.

Scott filed suit arguing that the rejection of the bid was racially motivated and alleged that the City's minority participation policy (the "Policy") discriminated against nonminority contractors in violation of the Equal Protection Clause. Both parties, Scott and the City, filed cross motions for summary judgment. The district court granted Scott's motion for summary judgment and held unconstitutional the City's MBE Program and Policy. The City appealed the grant of summary judgment and the district court's findings of fact to the Fifth Circuit Court of Appeals. The Circuit Court reviewed both the grant of summary judgment and the district court's findings of fact de novo.³⁰⁵

The *Scott* Court first addressed the issue of Scott's standing to challenge the constitutionality of the City's MBE program. The *Scott* Court opined that Scott "does not have standing to challenge every contract let by the City."³⁰⁶ Scott only has standing to challenge contracts that it is "able and ready to bid" and, therefore, the court limited its analysis to city construction contracts. In conducting this analysis, the Fifth Circuit focused on the manner and extent of the Department's implementation of the MBE Program.³⁰⁷

The *Scott* Court applied a three prong test in order to establish standing. Scott must demonstrate: (1) an "injury in fact"; (2) a causal relationship between the injury and the challenged conduct; and (3) a likelihood that a favorable ruling will redress the injury. Accordingly, the Circuit Court

³⁰¹ *Id.* at 238.

³⁰² *Id.*

³⁰³ *Id.*

³⁰⁴ *Id.*

³⁰⁵ *Id.* at 211.

³⁰⁶ *Id.* at 212.

³⁰⁷ *Id.* at 213.

ruled that Scott met all of the requirements to meet the standing test and concluded that Scott made an adequate showing of imminent harm. The *Scott* Court reasoned that as long as MBE preferences are used in the Department's construction contracts, Scott was threatened with imminent injury. Further, the other prerequisites for standing, causation and redressability, were also addressed because removal of the preferences would allow Scott to compete on an equal footing.³⁰⁸

The Circuit Court next turned its attention to the application of strict scrutiny to the facts of the case. First, the City contended that strict scrutiny should not be applicable to a policy that encourages "goals" rather than mandate a "quota". The Circuit Court rejected this argument because the distinction is immaterial. "Any one of these techniques induces an employer to hire with an eye toward meeting a numerical target" and, therefore, will result in racial preferences being granted to individuals.³⁰⁹

Second, the City urged the *Scott* Court not to apply strict scrutiny because the Department's preference was a race-neutral classification.³¹⁰ The preference was based on "disadvantaged" status and, therefore, a lower standard of review should apply to such preferences. Although the Circuit Court agreed that race-neutral measures are not subject to strict scrutiny, the *Scott* Court rejected the notion that the City's preference was race-neutral, finding that the City's construction contracts contained explicit language to promote the "participation of minorities and women [to] be equitably distributed throughout the construction industry."³¹¹ Further, the contract language created race-based presumptions that warrant the application of the strict scrutiny standard.

In applying the strict scrutiny standard, the Fifth Circuit highlighted *Croson's* emphasis on statistical evidence as well as the application of statistical evidence by other courts in determining whether the *Croson* evidentiary burden is satisfied.³¹² The City argued that it was an error for the district court to ignore its statistical evidence supporting the use of race-based presumptions. The City pointed to the findings of the study that concluded:

"White males and African Americans were the only two groups to obtain public works contracts. White males received 999 contracts, 94 percent of all contracts, and \$264.9 million, 97.7 percent of all Public Works contract dollars. African Americans received 59 contracts, 6 percent, and \$6.15 million, 2.3 percent of contract dollars. No women-owned firms or firms owned by other ethnic groups received contracts..."³¹³

³⁰⁸ *Id.* at 215.

³⁰⁹ *Id.*

³¹⁰ *Id.*

³¹¹ *Id.* at 216.

³¹² *Id.* at 218 (citing *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1526-27 (10th Cir. 1994)).

³¹³ *Id.*

The *Scott* Court rejected the City’s argument and noted that the City failed to adopt the study findings in 1995 and could not therefore rely upon the study in the pending litigation. The Circuit Court also found that the disparity study was not probative because it failed to include subcontracts in its analyses. For these reasons, the Court concluded that the City lacked the factual predicate necessary under the Equal Protection Clause and, therefore, upheld the lower court’s decision.³¹⁴

The City of Austin must therefore ensure that any disparity study it relies upon analyzes the relevant statistical pool of prime contract and subcontract activity, and it should adopt the disparity study’s statistical findings before re-establishing any race-conscious goals for City contracting.³¹⁵

6. Strict Scrutiny as Applied to the Disadvantaged Business Enterprise Program

In response to *Adarand III*, the U.S. Department of Transportation (“USDOT”) revised its DBE regulations in 1999 in order to comply with the narrow tailoring requirement of strict scrutiny.³¹⁶ These revisions included the implementation of a personal net worth standard for DBE program eligibility and the requirement for setting race-neutral goals in conjunction with race-conscious goals. The USDOT initially created the set of DBE regulations in 1982, which outlined the affirmative action requirements for DBEs. First promulgated in conjunction with the Surface Transportation Assistance Act (the “Act”), the regulations (found at 49 C.F.R. Part 26) helped facilitate the Act’s requirement of an aspirational goal of 10 percent of funds to be expended with small businesses owned and controlled by economically and socially disadvantaged individuals. This 10 percent DBE provision has been continued in various Acts that followed, such as the Transportation Equity Act for the 21st Century (1998) and the Intermodal Surface Transportation Efficiency Act of 1991.

Since the 1999 revision to the DBE regulations in response to *Adarand*, challenges to the revised regulations have arisen in several circuits—specifically in the Seventh, Eighth, and Ninth Circuits. In *Northern Contracting, Inc. v. State of Illinois Department of Transportation*,³¹⁷ the Seventh Circuit was asked to determine whether the Illinois Department of Transportation (“IDOT”) violated the U.S. Constitution in administering a DBE Program designed to increase the participation of socially and economically disadvantaged individuals in Illinois highway construction subcontracts. IDOT, being a USDOT funding recipient, was required to comply with federal law pertaining to its DBE program. Northern Contracting, Inc. (“NCI”), a nonminority male-owned construction company, filed suit against IDOT, alleging that IDOT’s program for compliance with the Transportation Equity Act (“TEA”) was in violation of the Equal Protection Clause. The *Northern Contracting* Court concluded, even though not at issue, that the federal government had a compelling interest in remedying discrimination in highway

³¹⁴ *Id.* at 219.

³¹⁵ *Id.* at 218.

³¹⁶ “Participation by Disadvantaged Business Enterprises in Department of Transportation Programs,” 64 Fed. Reg. 5096 (Feb. 2, 1999) (codified at 49 C.F.R. parts 23, 26).

³¹⁷ *Northern Contracting, Inc. v. Ill. Dep’t of Transp.*, 473 F.3d 715 (7th Cir. 2007).

construction.³¹⁸ The Seventh Circuit Court noted that NCI forfeited any challenge to the compelling interest prong of strict scrutiny, and instead NCI chose to focus on the narrow tailoring prong of the strict scrutiny test.

NCI argued that IDOT had to show its DBE program was narrowly tailored to remedy specific past discrimination by the State. The Seventh Circuit did not agree, however, and stated that the program was narrowly tailored to the compelling interest identified in remediating racial and gender discrimination in the federal highway construction market. Although NCI relied on a previous case, *Builders Association of Greater Chicago v. County of Cook*,³¹⁹ for its argument that IDOT had to demonstrate that its program was narrowly tailored to remedy specific past discrimination perpetrated by the State, the Circuit Court held that NCI's reliance on *Builders Association of Greater Chicago* was misplaced, as IDOT was acting as an "instrument" of federal policy and NCI could not collaterally attack the federal regulations through its challenge to IDOT's program.³²⁰ Thus, although NCI wanted to use the *Builders Association* case in support of their claim that the IDOT's DBE program was unconstitutional, the plaintiff erred in attempting to translate the *Builders Association* holding onto a federally-mandated program.³²¹

Another Circuit that has since vetted the revised DBE regulations is the Eighth Circuit in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, a decision that the Eighth Circuit held that Congress had a "compelling interest" in enacting the DBE legislation, as it had a sufficient evidentiary basis to conclude that persistent racism and discrimination in highway subcontracting warranted a race-conscious procurement program.³²² Looking first to the DBE regulations, the Eighth Circuit held that there were five factors which demonstrated that the DBE program was narrowly tailored: (i) there was flexibility within the regulations, (ii) the goals were tied to each local market, (iii) there was an emphasis on using race-neutral measures, (iv) all small businesses that could show they were socially and economically disadvantaged could participate, and (v) the personal net worth standard of \$750,000 for disadvantaged business owners limited the presumption of the minority business qualification.³²³ The Eighth Circuit then turned its analysis to whether the DBE program was narrowly tailored as applied in Nebraska and Minnesota, with respect to their local labor markets. When the Circuit Court considered the program's application, it concluded that the program was narrowly tailored on its face because the revised DBE program affords grantee States substantial discretion in setting the DBE

³¹⁸ *Id.* at 720.

³¹⁹ *Id.* at 722 (citing *Builders Ass'n of Greater Chi. v. Cnty. of Cook*, 265 F.3d 642 (7th Cir. 2001)).

³²⁰ *Id.* at 722.

³²¹ *Id.* Most recently, in *Midwest Fence Corp., v. United States Department of Transportation, et al.*, CA. 10-C-5627, U.S. Dist. Lexis 36277 (N.D. Ill. 2014), the IDOT DBE Program, as well as the Illinois State Toll Highway Authority DBE Program, was once again found to be constitution on both facial and as applied grounds. *See also* fn. 295.

³²² *Sherbrooke Turf v. Minn. Dep't of Transp.*, 345 F.3d 964 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

³²³ *Id.* at 972. The Personal Net Worth threshold was raised from \$750,000 to \$1.32 million in 2011, to account for the effects of inflation since 1989. *See* 76 Fed. Reg. 5083 (January 28, 2011).

goals.³²⁴ Thus, the Eighth Circuit rejected plaintiff's claim that the revised DOT regulations did not meet strict scrutiny standards.³²⁵

In contrast to the Eighth Circuit's and Seventh Circuit's affirmations that the DBE program was constitutional, the Ninth Circuit in *Western States Paving Co., Inc. v. Washington State Department of Transportation*³²⁶ illustrated a case in which the revised DBE regulations were deemed to violate the Equal Protection Clause. In *Western States Paving*, the plaintiff requested declaratory judgment that the TEA DBE preference program was unconstitutional.³²⁷ The State of Washington's Department of Transportation DBE program was subjected to the strict scrutiny standard in a two prong analysis, with the first part of the analysis considering whether the DBE legislation was facially constitutional, and the second of the Court's analysis examining whether the State of Washington's application of the DBE regulations was valid.

With respect to facial constitutionality aspect of analysis, the Court framed the issue to be whether the State of Washington carried its burden of demonstrating that the federal statute and regulations satisfied the strict scrutiny's exacting requirements. The Ninth Circuit, looking at the evidence weighed by Congress, stated that the federal government had a compelling interest for concluding that "discrimination within the transportation contracting industry hinders minorities' ability to compete for federally funded contracts."³²⁸ The Ninth Circuit then conducted its analysis with respect to whether the TEA Program was narrowly tailored. The Court held that the 10 percent DBE goal in the statute was narrowly tailored to the DBE regulations, as the goal was merely aspirational and the regulation provided for each state to establish its own utilization goal based upon the proportion of DBEs in its transportation contracting market.³²⁹ Because the DBE goals were customized by each state, the Circuit Court held that the DBE regulations were narrowly tailored to redress the effects of race and sex-based discrimination within this industry.

With respect to the validity of the application of the DBE regulations, the *Western States* Court looked to the utilization goal set by the State of Washington to determine whether this stated goal was unconstitutional. Although the State of Washington offered a statistic comparing the percentage of DBEs in the state (11.7%) to the percentage of funds awarded to them on race-neutral contracts (9%), the Ninth Circuit Court struck down this evidence as invalid, holding that the statistic was oversimplified and that it did not capture factors such as the capacity of the DBEs to undertake the contracted work.³³⁰ Unlike the Seventh Circuit in *Northern Contracting*, the Ninth Circuit in *Western States Paving* held that Congressional evidence standing alone was

³²⁴ *Id.* at 973.

³²⁵ Most recently, the constitutionality of the Minnesota DOT's DBE Program was upheld against an as implemented challenge. *See Geyer Signal et al., v. Minnesota Department of Transportation et al.*, CA. 11-321, 2014 U.S. Dist. LEXIS 43945 (D. Minn. 2014). *See also* fn. 295.

³²⁶ *W. States Paving Co., Inc., v. Wash. Dep't of Transp.*, 407 F.3d 983 (9th Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).

³²⁷ *Id.* at 987.

³²⁸ *Id.* at 992–993.

³²⁹ *Id.* at 994–995.

³³⁰ *Id.* at 1000.

not enough to support the strong basis in evidence requirement. Rather, the recipients of the federal funds must show a finding of discrimination separate and apart from the federal government's showing.³³¹ Thus, as the State of Washington failed to provide evidence of discrimination within its own contracting market, the Court held that the State failed to meet its burden of showing that its program was narrowly tailored to further Congress's compelling interest.³³²

B. Compelling Interest

1. Burden of Proof

The party challenging the use of race-conscious measures bears the ultimate burden of proof throughout the course of the litigation—despite the government's obligation to produce a strong factual predicate to support its program.³³³ The plaintiff must persuade the court that a program is constitutionally flawed by challenging the government's factual predicate for the program or by demonstrating that the program lacks a proper factual predicate.

Justice O'Connor explained the nature of the plaintiff's burden of proof in her concurring opinion in *Wygant v. Jackson Board of Education*.³³⁴ She stated that, following the production of the factual predicate supporting the program:

“[I]t is incumbent upon the non-minority [plaintiffs] to prove their case; they continue to bear the ultimate burden of persuading the court that the [government's] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently ‘narrowly tailored.’”³³⁵

Although it did not elaborate, in discussing the burden of proof in *W.H. Scott*, the Fifth Circuit wrote, “the burden of proof is on the plaintiff to prove its case by a preponderance of the evidence.”³³⁶ More recently, in *Rothe Development Corp. v. Department of Defense*, the Federal Circuit wrote that “the party challenging a statute bears the ultimate burden of persuading the court that it is unconstitutional.”³³⁷ In a facial challenge, the Plaintiff's burden is even heavier, as the Plaintiff must show that the statute cannot operate constitutionally under any circumstances.³³⁸ *Rothe* is clear that a governmental entity seeking to employ race-conscious

³³¹ *Id.* at 1002-1003.

³³² *Id.* In light of *Western States Paving*, the USDOT published a memorandum titled “FY 2006 DBE Goal Setting Approval Process and DBE Program Plans” (December 21, 2005) to provide guidance to Recipients.

³³³ *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 321 F.3d 950, 959 (10th Cir. 2003), *cert denied*, 540 U.S. 1027 (2003); *Coral Constr.*, 941 F.2d at 921.

³³⁴ *Wygant v. Jackson Board of Education*, 476 U.S. 267, 293 (1986).

³³⁵ *Id.* at 293.

³³⁶ *W.H. Scott*, 193 F.3d, at 219 (quoting the lower court's ruling).

³³⁷ *Rothe Dev. Corp. v. Dep't of Def.*, 545 F.3d 1023, 1036 (Fed. Cir. 2008) (applying the law of the Fifth Circuit).

³³⁸ *Id.* at 1032.

measures must show a strong basis in evidence.³³⁹ The standard for appellate review in making the determination if the Plaintiff has met this burden is a question of law, subject to *de novo* review.³⁴⁰ Applying this standard, the Federal Circuit upheld the Plaintiff's challenge to the constitutionality of the statutory scheme because it persuaded the court that the factual predicate for the program was flawed.³⁴¹

2. Strong Basis in Evidence

It is undisputed that remedying racial discrimination is a legitimate compelling interest for the City of Austin.³⁴² The procedural protocol established in city contracting by *Croson* imposes an initial burden of production upon the governmental entity to demonstrate that there is a compelling governmental interest and that the challenged MBE program is supported by a "strong basis in evidence," *i.e.*, documented evidence consistent with the presence of past or present discrimination.³⁴³ The plaintiff then has the ultimate burden of proof to rebut defendant's evidence and to prove that defendant's evidence is not sufficiently strong to establish a compelling interest.

In *W.H. Scott*, the Fifth Circuit reiterated the evidentiary standards developed in *Croson*, writing:

"[A] governmental entity can enact a race-conscious program to remedy past or present discrimination only where it has actively discriminated in its award of contracts or has been a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry. Therefore, the governmental entity must identify that discrimination with the particularity required by the Fourteenth Amendment, so that there is a strong basis in evidence for its conclusion that remedial action was necessary."³⁴⁴

"The [*Croson*] Court provided some guidance in determining what types of evidence would justify the enactment of a remedial scheme. ... 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

³³⁹ *Id.* at 1036.

³⁴⁰ *Id.* at 1035; ("[W]e will review the district court's grant of summary judgment *de novo*."). See also *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 321 F.3d 950, 958 (10th Cir. 2003); *Rothe Dev. Corp. v. U.S. Dep't of Defense*, 262 F.3d 1306, 1323 (Fed. Cir. 2001); *Majeske v. City of Chicago*, 218 F.3d 816, 820 (7th Cir. 2000); *Contractors Ass'n of E. Pa., Inc. v. City of Philadelphia*, 91 F.3d 586, 596 (3d Cir. 1996) (Contractors Ass'n II). But see *Eng'g Contractors Ass'n of S. Fla. Inc. v. Metropolitan Dade County*, 122 F.3d 895, 903-04 (11th Cir. 1997) (reviewing the determination for clear error).

³⁴¹ *Rothe*, 545 F.3d at 1045.

³⁴² *Croson*, 488 U.S. at 503; *W.H. Scott*, 199 F.3d., at 217. See also *Dean v. City of Shreveport*, 438 F.3d 448, 454 (5th Cir. 2006) (government has a compelling interest in remedying its own past discrimination).

³⁴³ *W.H. Scott*, 199 F.3d at 217. The Fifth Circuit in *Austin Black Contractors Ass'n v. City of Austin*, 78 F.3d 185, 186 (5th Cir. 1996) declined to extend *Croson* to mandate that the City adopt an affirmative action contracting program.

³⁴⁴ *Id.* (internal quotations and citations omitted).

could arise. ... Moreover, evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified.”³⁴⁵

The Fifth Circuit went on to recognize the importance of disparity studies in determining if a strong basis in evidence exists:

“Given *Croson's* emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether *Croson's* evidentiary burden is satisfied. Disparity studies are probative evidence of discrimination because they ensure that the ‘relevant statistical pool,’ of qualified minority contractors is being considered.”

The Court noted, however, that it did not endorse disparity studies as determinative in all conceivable cases, nor did it offer

“... a precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark. The sufficiency of a municipality’s findings of discrimination in a local industry must be evaluated on a case-by-case basis.”³⁴⁶

In the more recent *Rothe* case, the Federal Circuit ruled that the state does not have to conclusively prove past or present racial discrimination to establish a strong basis in evidence, but may meet its burden by relying on a statistically significant disparity between the availability of qualified, willing, and able minority subcontractors and their utilization by the governmental entity or its prime contractors.³⁴⁷ Also more recently, the *Rowe* Court wrote that the state should corroborate its statistical evidence with “significant anecdotal evidence of racial discrimination.”³⁴⁸ Notwithstanding this requirement, as discussed above, the plaintiff bears the ultimate burden of proof to persuade the Court that the MBE program is unconstitutional.

The case law indicates that a disparity study should include the following types of evidence to support the strong basis of evidence requirement: direct statistical evidence, anecdotal evidence, and indirect statistical evidence (“passive participation”). Each of these types of evidence will be briefly discussed in turn, along with additional guidance that courts have given with respect to each type of evidence.³⁴⁹

³⁴⁵ *Id.* at 217-18.

³⁴⁶ *Id.* at 218 n.11.

³⁴⁷ *Rothe*, 545 F.3d at 1037-38.

³⁴⁸ *Rowe*, 615 F.3d at 241.

³⁴⁹ See also NCHRP Report 644, *Guidelines For Conducting A Disparity And Availability Study For The Federal DBE Program* (2010) [hereinafter “NCHRP Report”]. The Report presents guidelines to conduct a legally defensible Disparity or Availability study for the DBE program.

3. Direct Statistical Evidence

The primary evidentiary requirement to show a compelling interest and allow an inference of discrimination is through statistics illustrating a disparity between the utilization of majority firms by the governmental entity compared to the utilization of minority firms. The disparity analysis results in a disparity index, or disparity ratio, that is then tested for its validity using a standard deviation analysis. However, in order for such statistics to be relevant, the state or local government must consider various factors, as discussed below.

Availability. In terms of defining “availability,” M/WBEs are deemed to be “available” if they are ready, willing, and able to perform. In determining the available pool of M/WBEs it is important to adopt an approach that is neither overinclusive or underinclusive of the universe of available firms. In *Associated General Contractors of America v. City of Columbus*,³⁵⁰ the court rejected the use of census data as a measure of available firms and concluded that the approach “overstated the percentage of available firms.”³⁵¹ An alternative approach to calculate the available pool is to use a bidders list, *i.e.*, to count *only* those firms that have bid on the entity’s projects. The bidders list approach, although simple, may be criticized as underinclusive because it fails to count, for example, qualified firms in the marketplace that have failed to bid on projects because of discrimination.³⁵²

Finally, several courts have approved using a “Custom Census” of M/WBEs and/or DBEs as a proper method in calculating availability. In *Northern Contracting*, the plaintiff attempted to argue that IDOT miscalculated the number of DBEs by using a custom census instead of a count of the number of DBEs registered and prequalified by IDOT. However, the Seventh Circuit upheld the broader net of DBEs that was captured by the custom census, concluding that it reflected an attempt by IDOT to arrive at more accurate numbers than what would be possible through a use of the registered list.³⁵³

Capacity. The “able to perform” requirement of *Croson* was examined in *Concrete Works* by the Tenth Circuit Court of Appeals. The *Concrete Works* Court recognized that plaintiff identified a legitimate factual dispute regarding whether the City of Denver’s percentage of M/WBE firms overstated their ability to perform. In discussing this argument, the Circuit Court recognized that M/WBE firms are generally smaller and less experienced than majority firms. This, however, was not the end of the inquiry because the Court of Appeals also recognized that “M/WBE construction firms are generally smaller and less experienced because of discrimination.”³⁵⁴

The trial court in *Northern Contracting* also recognized the soundness of this approach to capacity. The District Court explained that “[a]lthough laws mandating award of prime contracts to the lowest bidder remove concerns regarding direct discrimination...the indirect effects of

³⁵⁰ *Associated General Contractors of America v. City of Columbus*, 936 F.Supp. 1363 (S.D. Ohio 1996), *vacated* by 172 F.3d 411 (6th Cir. 1999) (vacated opinion not authority).

³⁵¹ *Id.* at 1390.

³⁵² *Id.* at 1389.

³⁵³ 473 F.3d at 723.

³⁵⁴ 321 F.3d at 981.

discrimination may linger.”³⁵⁵ The *Northern Contracting* Court opined that DBEs’ ability to compete for prime contracts “may be indirectly affected by discrimination in the subcontracting market or in the bonding and finance markets.”³⁵⁶

Other courts have also recognized the elastic nature of the construction industry in which the firm’s capacity expands and contracts based upon market demand. In *Concrete Works*, the City of Denver offered evidence at trial indicating that three employees is the median number of employees for all construction firms in the Denver Metropolitan Statistical Area and trial testimony that the number of permanent employees is not indicative of capacity because firms can hire temporary employees and rent equipment.³⁵⁷ Similarly, the trial court in *North Shore Concrete and Assoc., Inc. v. City of New York*, rejected the Plaintiff’s argument that the study over stated the number of available M/WBE firms because it did not take into consideration certain criteria such as the size of the firm. The *North Shore* Court concluded that firm size was not a proper indicator of capacity in determining the pool of available firms and that a small construction firm with an owner and only one employee, a secretary, had bid on construction projects worth more than one million dollars.³⁵⁸

Geographic Markets. In order to ensure the relevance of the disparity study, the geographic market of the firms must also be taken into account. While *Croson* did not directly spell out how the geographic market is to be determined, the Ninth Circuit in *Coral Construction Co. v. King County* stated that “an MBE program must limit its geographical scope to the boundaries of the enacting jurisdiction.”³⁵⁹ *Croson*, however, provided no such bright line rule for determining the local market area.

Although there are no cases directly on point in the Fifth Circuit, the recommended approach, adapted from the determination of markets in the context of the economics of antitrust, is to determine the geographic market by determining where the governmental entity is spending the majority of its contracting dollars. The NCHRP Report recommends that the relevant geographic market area encompass at least 75 percent of a governmental entity’s contract and subcontract spending regardless of the jurisdictional boundaries of the entity.³⁶⁰ Other courts have recognized the value of such an approach as well.³⁶¹

³⁵⁵ *Northern Contracting, Inc. v. State of Ill.*, No. 00-C-4515, 2005 WL 2230195 at *20 (N.D. Ill. Sept. 8, 2005); see also *Builder’s Ass’n of Greater Chicago*, 298 F.Supp. at 730-31 (discussing the hurdles faced by small firms in the construction industry).

³⁵⁶ *Northern Contracting*, 2005 WL 2230195 at *20.

³⁵⁷ 321 F.3d at 981.

³⁵⁸ *North Shore Concrete and Assoc., Inc. v. City of New York*, No. 94-CV-4017, 1998 WL 273027 at *25 (E.D.N.Y. April 12, 1998).

³⁵⁹ *Coral Construction*, 941 F.2d at 919.

³⁶⁰ NCHRP Report, *supra* note 72 at 29.

³⁶¹ *Concrete Works of Colorado v. City of Denver*, 36 F.3d 1513, 1528 (10th Cir. 1994) (local market defined as Denver MSA – 80 percent of construction and design dollars); George R. La Noue, *Standards for the Second Generation of Croson-Inspired Disparity Studies*, 26 URB. LAW. 495–96 & n.36 (1994) (geographic market defined as New York State and Eight Counties in New Jersey – comprising 90 percent of state dollars).

Period of Time Covered by the Study. Additionally, it appears that the recommended study period be a minimum of three to a maximum of five to six years. The critical issue is that the study period be long enough in duration to provide a representative picture of the governmental entity's spending profile and create a sufficiently large sample for statistical analysis. In *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*,³⁶² the Third Circuit Court reviewed a study relied upon by the city using data for three fiscal years.³⁶³ In *H.B. Rowe Company v. Tippet*, the Fourth Circuit also affirmed North Carolina's program which was supported by a disparity study using data for a five-year period.³⁶⁴

Notwithstanding the above, if the data covered by the study dates back too far, then the court may find such data to be stale. In *Builders Association*, the City of Chicago used data from 1990 to justify the compelling need to continue the race-based program in 2003. The Court stated that "viewed through the prism of 2003" the present program could not have been considered "narrowly tailored."³⁶⁵ This is in contrast to the district court's footnote in *Rothe Development Corp. v. U.S. Department of Defense*, where the District Court stated that "Congress cannot be expected to work in a vacuum" and that "Congress must have some sense of an institutional memory," rejecting plaintiff's objection to all evidence proffered by the Government that was prior to a certain year.³⁶⁶

Non-goal contract data. Furthermore, the use of non-goal contract data can be probative in supporting a finding of discrimination. In *Northern Contracting*, the State of Illinois introduced evidence regarding five percent of IDOT contracts that did not use DBE goals. On these "zero goal" contracts, DBEs received just 1.5 percent of the total value of the contracts. This, in conjunction with evidence relating to much higher levels of documented DBE availability and much higher levels of DBE utilization on contracts with DBE goals, led the district court to conclude that IDOT's program met the compelling evidence standard.

Adoption of Study by the Governmental Entity. Finally, the governmental entity should adopt the findings of disparity studies in order for a court to find such disparity study to be established as evidence. In *W.H. Scott Construction v. City of Jackson*, the City failed to establish a compelling interest, where the City did not adopt any particularized findings of discrimination in the construction industry and the disparity study commissioned by the City was not adopted by the City.³⁶⁷ The Court in that case stated that "whatever probity the study's findings might have had on our analysis is of no moment" as the "City refused to adopt the study when it was issued in 1995, and its belated reliance is unpersuasive."³⁶⁸ It appears that having the municipality or state

³⁶² *Contractors Ass'n*, 91 F.3d 586 (3d Cir. 1996).

³⁶³ *Id.* at 594.

³⁶⁴ *Rowe*, 615 F.3d 233 (4th Cir. 2010). The NCHRP Report (p. 34) notes that median time period employed in most disparity and availability studies was 5 years and the average was 5.3 years. The studies introduced in the *Sherbrooke* and *Northern Contracting* cases both covered a five-year period.

³⁶⁵ *Builders Ass'n*, 298 F. Supp. 2d at 742.

³⁶⁶ *Rothe Development Corp. v. U.S. Dep't of Defense*, 324 F. Supp. 2d 840, 851 (W.D. Tex. 2004).

³⁶⁷ *W.H. Scott Construction Co., Inc. v. City of Jackson*, 199 F.3d 206, 218-219.

³⁶⁸ *Id.* at 218.

agency adopt the study is an important element to establish the compelling interest component of the strict scrutiny standard, and failure to do so might be dispositive.

4. Passive Participation (Indirect Statistical Evidence)

A significant form of evidence that the government may present is passive participation in a discriminatory market area. In requiring that a state or local government show that it perpetuated the discrimination to be remedied by the M/WBE program, the *Croson* court noted that the government need not be an active participant in the discrimination. Rather, the Court stated that passive participation would suffice in satisfying the Court's strict scrutiny standard.³⁶⁹

The difference between active and passive participation can be illustrated by this example: evidence of active participation would be if the governmental entity actively created barriers to exclude M/WBEs from contracting opportunities. Evidence of passive participation would be the government's infusion of tax dollars into a discriminatory industry. The *Croson* Court highlighted that a government could passively participate in private sector discrimination simply through its monetary involvement, stating "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."³⁷⁰

In *Concrete Works of Colorado v. City and County of Denver*,³⁷¹ the City of Denver relied upon marketplace data that measured discrimination in the overall Denver construction market to satisfy the *Croson* compelling interest standard. The City produced evidence at trial that it indirectly contributed to private sector discrimination by awarding public contracts to firms that discriminated against M/WBEs in their private sector work.³⁷² Concrete Works argued that marketplace data was irrelevant because only discrimination by the City or its prime contractors could demonstrate a strong basis in evidence.³⁷³ The Tenth Circuit Court of Appeals in *Concrete Works* rejected this argument and noted that it did not read *Croson* or the Court's prior appellate rulings as requiring the municipality to identify an exact linkage between its award of public contracts and public discrimination.³⁷⁴ Rather, the Court of Appeals sided with the City in stating that the City's strong basis in evidence of marketplace discrimination *can* assist in establishing its compelling interest.³⁷⁵ The Court of Appeals held that the City's anecdotal evidence and evidence linking its spending practices to the evidence of marketplace discrimination sufficiently illustrated that it indirectly contributed to private discrimination and was a passive participant in private discrimination.

³⁶⁹ *Croson*, 488 U.S. at 509.

³⁷⁰ *Id.* at 492.

³⁷¹ *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 321 F.3d 950, 959 (10th Cir. 2003), *cert denied*, 540 U.S. 1027 (2003).

³⁷² *Id.* at 976.

³⁷³ *Id.*

³⁷⁴ *Id.* at 973.

³⁷⁵ *Id.*

The District Court in *Builders Association of Greater Chicago v. City of Chicago*,³⁷⁶ also found evidence of the lack of M/WBE participation on private construction contracts probative. In explaining the import of marketplace discrimination, the District Court opined:

The anecdotal evidence indicates that M/WBEs are sometimes ignored because of racial, ethnic or gender animus or stereotyping. That cannot be quantified...The tendency to stick with the old and ignore the new affects all newer firms, not just M/WBEs. But here the vestiges of past discrimination linger on to skew the marketplace and adversely impact M/WBEs disproportionately as more recent entrants to the industry. Not too long ago white male firms had a near monopoly in the industry and they, therefore, are the beneficiaries of a continuing adherence to old relationships.³⁷⁷

The District Court affirmed that the City had a compelling interest not to perpetuate with tax dollars a market skewed by past discrimination that restricts M/WBE competition in the construction market.³⁷⁸

5. Anecdotal Evidence

Anecdotal evidence that reflects the personal experiences of individuals with discrimination in contracting opportunities is relevant because it goes to the question of whether observed statistical disparities are due to discrimination and not to some other nondiscriminatory cause or causes.³⁷⁹ As observed by the Supreme Court, anecdotal evidence that is presented in a “pattern or practice” discrimination case could be persuasive because it “brought the cold [statistics] convincingly to life.”³⁸⁰ Testimony about discrimination by prime contractors, unions, bonding companies, suppliers and lenders has been found relevant regarding barriers both to minority firms’ business formation and to their success on governmental projects.³⁸¹ While anecdotal evidence is insufficient standing alone, “[p]ersonal accounts of actual discrimination or the effects of discriminatory practices may, however, vividly complement empirical evidence. Moreover, anecdotal evidence of a [government’s] institutional practices that exacerbate discriminatory market conditions are [sic] often particularly probative.”³⁸² “[W]e do not set out a categorical rule that every case must rise or fall entirely on the sufficiency of the numbers. To the contrary, anecdotal evidence might make the pivotal difference in some cases; indeed, in an exceptional case, we do not rule out the possibility that evidence not reinforced by statistical evidence, as such, will be enough.”³⁸³

³⁷⁶ *Builders Ass’n of Greater Chi. v. City of Chi.*, 298 F.Supp.2d 725 (N.D Ill. 2003).

³⁷⁷ *Id.* at 738.

³⁷⁸ *Id.*

³⁷⁹ *Webster v. Fulton County*, 51 F.Supp.2d 1354, 1363 (N.D. Ga. 1999).

³⁸⁰ *Int’l Bhd. of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

³⁸¹ *Adarand VII*, 228 F.3d at 1168-1172.

³⁸² *Concrete Works II*, 36 F.3d at 1520, 1530.

³⁸³ *Engineering Contractors*, 122 F.3d at 926.

Although there is no case directly on point in the Fifth Circuit, recently the Fourth Circuit specifically rejected the notion that anecdotal testimony must be “verified” or corroborated, as befits the role of evidence in legislative decision-making as opposed to judicial proceedings. “[The Plaintiff] offered no rationale as to why a fact finder could not rely on the State’s ‘unverified’ anecdotal data. Indeed, a fact finder could very well conclude that anecdotal evidence need not—indeed cannot—be verified because it ‘is nothing more than a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perceptions.”³⁸⁴ Likewise, the Tenth Circuit held that “Denver was not required to present corroborating evidence and [Plaintiff] was free to present its own witnesses to either refute the incidents described by Denver’s witnesses or to relate their own perceptions on discrimination in the Denver construction industry.”³⁸⁵

C. The Narrow Tailoring Analysis

Croson requires that an MBE program be “narrowly tailored” to remedy current evidence of discrimination.³⁸⁶ The Fifth Circuit Court of Appeals in *Scott* declined to address the narrow tailoring prong of *Croson* because the City failed to establish a compelling interest.³⁸⁷ Unlike *Scott*, the Fourth Circuit in *Rowe* applied the narrowly tailored analysis to determine if the North Carolina statutory scheme met constitutional scrutiny. The Fourth Circuit identified six factors to consider in evaluating whether the state statute was narrowly tailored:

1. The necessity of the policy and the efficacy of alternative race neutral policies;
2. The planned duration of the policy;
3. The relationship between the numerical goal and the percentage of minority group members in the relevant population;
4. The flexibility of the policy, including waivers if the goal cannot be met;
5. The overinclusiveness or underinclusiveness of the racial or gender classification; and
6. The burden of the policy on innocent third parties.³⁸⁸

First, there was ample evidence that the state considered race-neutral options, including the state’s Small Business Enterprise Program and the race-neutral options outlined in the federal

³⁸⁴ *Rowe*, 615 F.3d at 249.

³⁸⁵ *Concrete Works*, 321 F.3d at 989.

³⁸⁶ *See Croson*, 488 U.S. at 509-10.

³⁸⁷ *W.H. Scott*, 199 F.3d at 291.

³⁸⁸ *Rowe*, 615 F.3d at 252. *See also Dean v. Shreveport*, 438 F.3d at 458 (applying the same five factors in public employment to ensure race-conscious measures are narrowly tailored).

DBE program. “Indeed Rowe identifies no viable race-neutral alternatives that North Carolina has failed to consider or adopt.”³⁸⁹

Second, under duration of the policy, the *Rowe* court found elements that were particularly compelling in showing that the state program was narrowly tailored: (i) the program set a specific expiration date, and (ii) the program required that a new disparity study be conducted every five years. Other cases also instruct that “narrowly tailored” means that the remedial program should include these durational limitations.³⁹⁰ With a core purpose of the Fourteenth Amendment being to eliminate all governmentally imposed discrimination based on race, such race-conscious policies must be limited in time.³⁹¹

Third, the state took concrete steps to ensure that the participation goals were related to the percentage of minority subcontractors in the relevant market.³⁹² The “project by project basis” goal-setting process accurately reflects the pool of available minority owned businesses.³⁹³ The *Rowe* court summarized the process as follows:

First, the Department generates a report detailing the type of work that it anticipates subcontractors will perform on a particular project. Next, a goal-setting committee consults its database of certified minority contractors in the relevant geographic area capable of performing those types of work. Consulting the report, the database, and its own members’ experience, the committee then sets a project-specific participation goal. Notably, this goal-setting process does not mechanically require minority participation; in fact, between July 2002 and February 2004, the committee set a goal of zero percent minority participation on approximately 10 percent of projects.³⁹⁴

Accordingly, the court found that the state had satisfied the third factor in the narrowly tailored analysis.

Fourth, *Rowe* also demonstrated the importance of waivers if project specific contract goals are not met in determining whether race-based programs are narrowly tailored. The *Rowe* court relied upon the “lenient standard and flexibility of the ‘good faith’ requirement” of the North Carolina statutory scheme. The waiver component of the state’s program only rejected 13 of 878

³⁸⁹ *Id.*

³⁹⁰ *Western States Paving*, 407 F.3d at 994 (holding that the Transportation Equity Act was subject to reauthorization by Congress); *Sherbrooke*, 345 F.3d at 972 (holding that a state was able to terminate its DBE program if it met its annual overall goal through race-neutral means for two consecutive years); *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 730, 738 (6th Cir. 2000) (holding that a DBE program was not narrowly tailored because it did not have a sunset provision or expiration).

³⁹¹ *Id.* at 994.

³⁹² *Rowe*, 615 F.3d at 253.

³⁹³ *Id.*

³⁹⁴ *Id.*

good faith applications including, *Rowe*, for failing to meet the Good Faith Efforts requirement.³⁹⁵

In *Sherbrooke*, the court pointed to the DBE program's "substantial flexibility" and the fact that a state could obtain waivers and exemptions from any requirement and not be penalized for a good faith failure to meet its overall goals.³⁹⁶ The flexibility to waive contract specific goals supports the court's findings that such race-conscious programs are narrowly tailored and thus constitutional.

Fifth, the *Rowe* court also rejected the plaintiff's two arguments that the state's contracting program places a substantial burden on prime contractors.³⁹⁷ There was not an onerous solicitation and follow-up requirement because there was no need for additional employees to dedicate to the tasks.³⁹⁸ *Rowe* offered no evidence to support its contention that complying with the state's program required it to subcontract work that it could perform substantially cheaper on its own.³⁹⁹ The state, on the other hand, offered evidence from the 2004 study that prime contractors need not subcontract work they can self-perform.⁴⁰⁰

Finally, *Rowe* contended that the North Carolina statutory scheme was overinclusive and therefore not narrowly tailored.⁴⁰¹ As held by the *Rowe* court, "the statute expressly limits relief to those racial or ethnicity classifications...that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department."⁴⁰²

In summary, the *Rowe* court found the North Carolina statutory scheme narrowly tailored, except for the inclusion of WBE firms, after reviewing all of the factors outlined above.⁴⁰³

D. Conclusion

The decision of the U.S. Supreme Court in the *Croson* and *Adarand* cases changed the legal landscape for affirmative action in public contracting programs. The U.S. Supreme Court altered the authority of state and local governments and the federal government to institute remedial race-conscious public contracting programs. This Appendix has examined what *Croson*, *Adarand*, and their progeny, require for the City of Austin to continue to pursue a constitutional race- and gender-conscious public contracting program. As discussed above, a disparity study

³⁹⁵ *Id.*

³⁹⁶ *Sherbrooke*, 345 F.3d at 972.

³⁹⁷ *Rowe*, 615 F.3d at 254.

³⁹⁸ *Id.*

³⁹⁹ *Id.*

⁴⁰⁰ *Id.*

⁴⁰¹ *Id.*

⁴⁰² *Id.*

⁴⁰³ *Id.*

must provide the factual predicate for a race- and/or gender-conscious affirmative action contracting program. Depending on the findings of its own Disparity Study, the City of Austin may consider race and gender-based remedies in its contracting activity.

E. List of Authorities

Cases

Adarand Constructors, Inc. v. Federico Peña, 515 U.S. 200 (1995) (“*Adarand IIF*”).

Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir., 2000), *cert. granted*, 532 U.S. 941, *then dismissed as improvidently granted*, 534 U.S. 103 (2001) (“*Adarand VII*”).

Associated General Contractors of America v. City of Columbus, 936 F.Supp. 1363 (S.D. Ohio 1996), *vacated by* 172 F.3d 411 (6th Cir. 1999) (vacated opinion not authority).

Associated General Contractors of Ohio v. Drabik, 50 F.Supp. 741 (S.D. Ohio 1999).

Austin Black Contractors Ass’n v. City of Austin, 78 F.3d 185 (5th Cir. 1996).

Brunet v. City of Columbus, 1 F.3d 390 (6th Cir. 1993).

Builders Association of Greater Chicago v. City of Chicago, 298 F.Supp.2d 725 (N.D. Ill. 2003).

Builders Association of Greater Chicago v. County of Cook, 256 F.3d 642 (7th Cir. 2001).

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

Concrete Works of Colorado v. City and County of Denver, 321 F.3d 950, *cert. denied*, (10th Cir. 2003) (*Concrete Works II*).

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

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

Craig v. Boren, 429 U.S. 190 (1976).

Dean v. City of Shreveport, 438 F.3d 448 (5th Cir. 2006).

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

Geyer Signal et al., v. Minnesota Department of Transportation et al., CA. 11-321, 2014 U.S. Dist. LEXIS 43945 (D. Minn. 2014).

International Brotherhood of Teamsters v. United States, 431 U.S. 324 (1977).

Majeske v. City of Chicago, 218 F.3d 816 (7th Cir. 2000).

Michigan Road Builders Association v. Milliken, 834 F.2d 583 (6th Cir. 1987).

Midwest Fence Corp., v. United States Department of Transportation, et al., CA. 10-C-5627, U.S. Dist. Lexis 36277 (N.D. Ill. 2014).

Mississippi University for Women v. Hogan, 458 U.S. 718 (1982).

Monterey Mechanical Co. v. Pete Wilson, et al., 125 F.3d 702 (9th Cir. 1997).

Northern Contracting, Inc. v. Illinois Department of Transportation, 473 F.3d 715 (7th Cir. 2007).

Northern Contracting, Inc. v. Illinois Department of Transportation, No. 00-C-4515, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005).

North Shore Concrete and Assoc., Inc. v. City of New York, No. 94-CV-4017, 1998 WL 273027 (E.D.N.Y. April 12, 1998).

H. B. Rowe, Inc. v. Tippet, et al., 615 F.3d 233 (4th Cir. 2010).

Rothe Development Corp. v. U.S. Department of Defense, 262 F.3d 1306 (Fed. Cir. 2001).

Rothe Development Corp. v. U.S. Department of Defense, 324 F.Supp.2d 840 (W.D. Tex. 2004).

Rothe Development Inc., v. Department of Defense, et al., CA. 12-cv-0744(KBJ), 2015 U.S. Dist. LEXIS 72925 (D.D.C. 2015).

Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F.3d 964 (8th Cir. 2003), *cert. denied*, 124 S.Ct. 2158 (2004).

United States v. Paradise, 480 U.S. 149, 171 (1987).

W.H. Scott Construction Co., Inc. v. City of Jackson, 199 F.3d 206 (5th Cir. 1999).

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

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

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

Federal Regulations

64 Fed. Reg. 5096 (Feb. 2, 1999).

49 C.F.R. Part 23.

49 C.F.R. Part 26.

Reports

La Noue, G. (1994). *Standards for the Second Generation of Croson-Inspired Disparity Studies*, 26 URB. LAW. 495–96 & n.36.

Wainwright, J. and C. Holt (2010), *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, Transportation Research Board of the National Academies, NCHRP Report, Issue No. 644.

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Appendix C. Master M/WBE Directory Sources

A. Entities with lists of M/WBE firms that were duplicative of previously collected lists

ACS- A Xerox Company	Hewlett-Packard
Apple	Home Depot Technology Center
AT&T	Hospira
Austin ISD	IBM
Bank of America	Intel
Capital Area Metropolitan Planning Organization	JPMorgan Chase Bank
Capital Metro	LegalZoom
Central Health	Oracle
Cisco Systems	Procurement Technical Assistance Centers
City of Georgetown	Progressive Insurance Co.
City of Leander	Sears Customer Care
City of Marble Falls	Seton Family of Hospitals
City of Round Rock	Small Business District Offices
City of San Marcos	Texas DOT Unified Certification Program
Dell Computer	DBE List
Farmers Insurance Group Subsidiary of	Travis County
Zurich Insurance	United Parcel Service
Freescall Semiconductor	University of Texas at Austin
Girling Health Care	URS Corp.
Hanger Inc.	Wells Fargo Bank Texas

B. Entities that had no directory, or their directory did not identify race and gender

Aditya Birla Minacs	Caldwell County
American Achievement Corp.	Circuit of the Americas
Austin Community College	City of Bastrop
Austin Presbyterian Theological Seminary	City of Buda
Austin Regional Clinic	City of Burnet
Barton Springs/ Edwards Aquifer	City of Cedar Park
Conservation District	City of Elgin
Bastrop County	City of Fredericksburg
Bastrop ISD	City of Hutto
BIG Austin	City of Kyle
Blanco County	City of Lockhart
Bluebonnet Electric Cooperative	City of Luling
Buda Economic Development Corporation	City of Pflugerville
Burleson County	City of Taylor
Burnet County	Del Valle ISD

Dripping Springs ISD
 Eanes ISD
 Episcopal Theological Seminary of the Southwest
 Fayette County
 Field Asset Services
 Fredericksburg Chamber of Commerce
 Georgetown ISD
 Giddings ISD
 Gillespie County
 Goodwill Industries
 Greater Austin Asian Chamber of Commerce
 Greater Austin Hispanic Chamber of Commerce
 Harden Healthcare Inc.
 Hays Consolidated ISD
 Hays County
 Hunter Industries
 Huston-Tillotson University
 Hutto ISD
 La Grange ISD
 Lake Travis ISD
 Leander ISD
 Lee County
 Leif Johnson Ford
 Llano County
 Lockhart ISD
 Lower Colorado River Authority (LCRA)
 Luling ISD
 Mason County

Milam County
 Mr. Gatti's Pizza
 National Center for American Indian Enterprise Development
 National Instruments
 National Minority Business Council
 Pedernales Electric Co-Op
 Pflugerville ISD
 PPD Development
 Round Rock ISD
 San Marcos ISD
 Schlotzsky's
 Small Business Development Centers
 South Texas Women's Business Center (San Antonio)
 Spansion
 St. David's Healthcare Partnership
 St. Edwards University
 Supplierdiversity.com
 Taylor ISD
 Texas Guaranteed Student Loan Corp
 Texas Mutual Insurance Co.
 Thundercloud Subs
 Travis County Emergency Services, District 2 (Pflugerville Fire Department)
 Travis County Emergency Services, District 4 (Travis County Fire Control)
 Trisun Healthcare
 Whole Foods Market
 Williamson County

C. Entities that were non responsive to repeated contacts

Activision Blizzard
 Advanced Micro Devices
 American Concern Society
 Applied Materials
 Austin American-Statesman
 BAE Systems
 Capital City African American Chamber of Commerce
 Charles Schwab
 Clinical Pathology Laboratories
 CSC Financial Services Group
 Dynamic Systems

Emerson Process Management
 GCA Services
 Georgetown Economic Development Corporation
 Harte-Hankes Response Management
 H-E-B
 Image Microsystems
 J. C. Evans Construction Co.
 National Association of Women Business Owners-San Antonio
 OneWest Bank Group
 Pearson Educational Measurements

Randall's
Samsung Austin Semiconductor
Southwestern University
Sports Clips Inc.
TeleNetwork

Time Warner Cable Co.
US Pan Asian American Chamber-SW
Women's Business Enterprise National
Council

D. Entities that declined to provide the requested information

3M Corp
Dresser Wayne
Electric Reliability Council of Texas

Flextronics
Maximus
State Farm Insurance Co.

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Appendix D. Detailed Utilization, Availability & Disparity Tables

This appendix presents M/WBE utilization, availability, and disparity statistics analogous to those presented in Chapter VI, Tables 6.8 through 6.13, according to detailed NAICS Industry Groups.⁴⁰⁴

Three sets of eight tables each are presented; Within each set, there are two each for Construction, Professional Services, Nonprofessional Services, and Commodities, respectively. Within each procurement category, the first table uses dollars awarded as the metric of utilization and the second table uses dollars paid.

The first set of eight tables shows results for all contracts, regardless of whether any M/WBE goals were established. The second set shows results for contracts on which M/WBE goals were established. The final set shows results for contracts on which no M/WBE goals were established.

⁴⁰⁴ Comparable statistics were calculated at the NAICS Industry level as well (five-digit and six-digit NAICS). In the interest of space, these results are not reported here. Four-digit NAICS codes are most comparable to four-digit Standard Industrial Classification (SIC) codes, which were used prior to the advent of the NAICS system.

Table AD.1. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	8.71	8.04	
Asian	0.00	0.00	
Native American	0.03	0.00	
Minority	8.73	8.04	
Nonminority female	6.49	12.04	53.92*
M/WBE total	15.23	20.08	75.83
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.02	3.26	0.66****
Hispanic	7.23	11.88	60.89
Asian	0.26	2.04	12.88***
Native American	0.00	0.68	0.00****
Minority	7.52	17.86	42.09****
Nonminority female	12.57	14.68	85.58
M/WBE total	20.08	32.54	61.71***
Nonresidential Building Construction (NAICS 2362)			
African American	2.39	0.63	
Hispanic	10.93	8.06	
Asian	2.54	0.25	
Native American	0.00	0.22	0.00**
Minority	15.86	9.15	
Nonminority female	0.74	14.90	4.95****
M/WBE total	16.59	24.05	69.00
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	1.37	9.80	13.95
Asian	1.94	1.96	98.73
Native American	0.00	0.00	
Minority	3.30	11.76	28.08
Nonminority female	0.25	9.15	2.75****
M/WBE total	3.55	20.92	17.00***
Building Equipment Contractors (NAICS 2382)			
African American	1.44	1.41	
Hispanic	31.34	7.57	
Asian	6.25	0.82	
Native American	0.07	0.37	19.77
Minority	39.11	10.18	
Nonminority female	4.51	7.24	62.26
M/WBE total	43.62	17.43	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.22	1.22	17.95*
Hispanic	49.76	15.47	
Asian	0.00	1.36	0.00****
Native American	0.13	0.62	21.46
Minority	50.11	18.67	
Nonminority female	11.39	12.03	94.68
M/WBE total	61.50	30.70	
General Freight Trucking (NAICS 4841)			
African American	13.17	11.44	
Hispanic	28.58	21.69	
Asian	3.71	0.34	
Native American	0.00	3.34	0.00****
Minority	45.46	36.81	
Nonminority female	0.76	7.78	9.79****
M/WBE total	46.22	44.59	
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.64	0.00****
Hispanic	8.53	17.36	49.13***
Asian	0.18	0.11	
Native American	0.00	0.05	0.00
Minority	8.71	20.15	43.21***
Nonminority female	5.37	10.33	52.02
M/WBE total	14.08	30.48	46.20****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	2.78	19.66	14.13****
Hispanic	0.05	0.48	10.28
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	2.83	20.14	14.04****
Nonminority female	8.93	11.11	80.36
M/WBE total	11.75	31.25	37.62***
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	33.09	11.15	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	33.09	11.15	
Nonminority female	0.00	0.00	
M/WBE total	33.09	11.15	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	5.94	1.83	
Hispanic	0.00	8.71	0.00****
Asian	0.00	2.52	0.00****
Native American	0.00	1.06	0.00****
Minority	5.94	14.11	42.08***
Nonminority female	5.90	14.56	40.55***
M/WBE total	11.84	28.67	41.31****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	22.20	4.90	
M/WBE total	22.20	13.62	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	5.79	1.48	
Hispanic	11.65	7.68	
Asian	6.45	3.04	
Native American	0.08	0.70	10.68****
Minority	23.96	12.90	
Nonminority female	10.16	7.37	
M/WBE total	34.12	20.27	
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00****
Nonminority female	0.00	11.41	0.00****
M/WBE total	0.00	22.83	0.00****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	21.53	5.80	
Asian	0.16	10.94	1.47****
Native American	0.00	0.00	
Minority	21.69	16.74	
Nonminority female	3.33	11.15	29.82
M/WBE total	25.01	27.89	89.68

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Services to Buildings and Dwellings (NAICS 5617)			
African American	50.91	0.30	
Hispanic	4.69	18.93	24.80***
Asian	0.01	0.15	9.84
Native American	0.00	0.15	0.00**
Minority	55.62	19.53	
Nonminority female	5.77	7.22	79.92
M/WBE total	61.39	26.75	
Residential Building Construction (NAICS 2361)			
African American	5.92	0.67	
Hispanic	65.04	15.87	
Asian	0.00	0.30	0.00
Native American	0.53	0.04	
Minority	71.49	16.89	
Nonminority female	5.13	10.59	48.45
M/WBE total	76.62	27.47	
Building Finishing Contractors (NAICS 2383)			
African American	0.24	2.42	9.72**
Hispanic	3.46	33.00	10.47****
Asian	4.02	0.93	
Native American	0.00	2.28	0.00****
Minority	7.71	38.63	19.96****
Nonminority female	15.42	10.33	
M/WBE total	23.13	48.96	47.25****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	26.90	7.00	
M/WBE total	26.90	7.00	
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00****
Nonminority female	0.00	11.09	0.00****
M/WBE total	0.00	23.35	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.23	0.00****
Hispanic	0.97	12.20	7.96****
Asian	40.51	10.64	
Native American	0.00	0.00	
Minority	41.48	25.07	
Nonminority female	3.24	11.76	27.55***
M/WBE total	44.72	36.83	
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.09	0.00	
Asian	0.00	7.95	0.00****
Native American	0.00	0.00	
Minority	0.09	8.87	1.00***
Nonminority female	3.31	2.75	
M/WBE total	3.40	11.62	29.22
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00***
Hispanic	98.85	6.37	
Asian	0.00	2.68	0.00***
Native American	0.00	1.34	0.00
Minority	98.85	13.63	
Nonminority female	1.07	11.51	9.31***
M/WBE total	99.92	25.13	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.02	3.78	0.46**
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.02	13.80	0.13****
Nonminority female	5.64	36.18	15.60****
M/WBE total	5.66	49.97	11.33****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	14.66	0.74	
Asian	0.00	0.56	0.00
Native American	0.00	0.00	
Minority	14.66	1.30	
Nonminority female	0.00	18.98	0.00****
M/WBE total	14.66	20.28	72.28
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.44	0.00****
Hispanic	15.85	12.84	
Asian	0.00	0.20	0.00
Native American	0.00	0.81	0.00
Minority	15.85	19.29	82.17
Nonminority female	6.25	8.25	75.75
M/WBE total	22.10	27.54	80.25
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	1.90	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	1.90	16.67	11.37***
Nonminority female	7.07	11.11	63.60
M/WBE total	8.96	27.78	32.27**
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00****
Asian	0.00	9.49	0.00****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00****
Nonminority female	0.00	18.97	0.00****
M/WBE total	0.00	37.94	0.00****
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.38	2.99	12.63
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.38	5.97	6.31
Nonminority female	0.00	10.15	0.00*
M/WBE total	0.38	16.12	2.34*

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	66.77	0.53	
Hispanic	9.98	5.86	
Asian	12.32	0.43	
Native American	0.00	0.04	0.00
Minority	89.07	6.86	
Nonminority female	7.47	9.59	77.87
M/WBE total	96.54	16.46	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	4.22	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.22	0.00****
Nonminority female	37.36	0.00	
M/WBE total	37.36	4.22	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00****
Asian	99.30	2.03	
Native American	0.00	0.00	
Minority	99.30	6.49	
Nonminority female	0.70	7.25	9.66**
M/WBE total	100.00	13.74	
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	12.50	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	12.50	0.00****
Nonminority female	0.00	0.00	
M/WBE total	0.00	12.50	0.00****
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00****
Hispanic	0.00	0.98	0.00****
Asian	0.00	3.25	0.00****
Native American	0.00	0.29	0.00**
Minority	0.00	5.94	0.00****
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Investigation and Security Services (NAICS 5616)			
African American	11.24	3.32	
Hispanic	0.00	6.85	0.00****
Asian	5.36	0.63	
Native American	0.00	0.00	
Minority	16.60	10.80	
Nonminority female	0.00	14.61	0.00****
M/WBE total	16.60	25.41	65.32
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00****
Nonminority female	88.90	16.67	
M/WBE total	88.90	25.00	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	2.91	15.04	19.34
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	2.91	19.86	14.64
Nonminority female	28.65	14.19	
M/WBE total	31.56	34.05	92.69
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	5.51	2.94	
Hispanic	8.30	0.79	
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	13.81	5.11	
Nonminority female	53.69	22.51	
M/WBE total	67.49	27.62	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	98.87	10.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	98.87	10.00	
Nonminority female	0.00	10.00	0.00****
M/WBE total	98.87	20.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	11.28	0.00	
Hispanic	17.17	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	28.45	13.27	
Nonminority female	7.46	9.26	80.53
M/WBE total	35.91	22.53	
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	14.97	5.03	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	14.97	5.03	
Nonminority female	12.30	8.98	
M/WBE total	27.27	14.01	
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	5.88	0.00***
Hispanic	64.65	7.35	
Asian	0.00	2.94	0.00
Native American	0.00	0.00	
Minority	64.65	16.18	
Nonminority female	0.00	7.98	0.00***
M/WBE total	64.65	24.16	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00****
Asian	0.00	20.07	0.00****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00****
Nonminority female	100.00	1.09	
M/WBE total	100.00	41.56	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	1.08	7.69	14.03
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.08	7.69	14.03
Nonminority female	0.00	0.00	
M/WBE total	1.08	7.69	14.03
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00****
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00****
Nonminority female	0.39	9.85	3.91**
M/WBE total	0.39	14.42	2.67***
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.71	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.71	0.88	79.91
Nonminority female	82.28	1.07	
M/WBE total	82.98	1.95	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	9.48	7.05	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	9.48	14.10	67.20
Nonminority female	90.52	43.59	
M/WBE total	100.00	57.69	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00****
M/WBE total	0.00	50.00	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	0.75	0.00
Hispanic	0.00	9.70	0.00****
Asian	0.00	9.70	0.00****
Native American	0.00	0.00	
Minority	0.00	20.15	0.00****
Nonminority female	0.00	15.17	0.00****
M/WBE total	0.00	35.32	0.00****

Source and Notes: *See* Table 6.8.

Table AD.2. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	11.19	8.08	
Asian	0.00	0.00	
Native American	0.03	0.00	
Minority	11.23	8.08	
Nonminority female	4.84	12.04	40.22***
M/WBE total	16.07	20.12	79.85
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.01	3.26	0.24****
Hispanic	8.22	11.88	69.22
Asian	0.32	2.04	15.70*
Native American	0.00	0.68	0.00****
Minority	8.55	17.86	47.87****
Nonminority female	14.84	14.68	
M/WBE total	23.39	32.54	71.89**
Nonresidential Building Construction (NAICS 2362)			
African American	2.53	0.73	
Hispanic	11.61	8.01	
Asian	0.46	0.30	
Native American	0.00	0.25	0.00
Minority	14.60	9.30	
Nonminority female	0.55	14.59	3.77****
M/WBE total	15.15	23.88	63.42
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.32	9.80	3.24****
Asian	3.03	1.96	
Native American	0.00	0.00	
Minority	3.34	11.76	28.43
Nonminority female	0.23	9.15	2.52****
M/WBE total	3.57	20.92	17.09***
Building Equipment Contractors (NAICS 2382)			
African American	1.30	1.41	92.07
Hispanic	34.03	7.58	
Asian	6.04	0.82	
Native American	0.10	0.37	26.13
Minority	41.47	10.18	
Nonminority female	4.07	7.25	56.13
M/WBE total	45.54	17.43	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.22	1.22	17.74
Hispanic	50.27	15.64	
Asian	0.00	1.36	0.00****
Native American	0.16	0.67	23.90
Minority	50.65	18.90	
Nonminority female	11.73	12.24	95.82
M/WBE total	62.38	31.14	
General Freight Trucking (NAICS 4841)			
African American	13.05	11.44	
Hispanic	25.48	21.69	
Asian	4.70	0.34	
Native American	0.00	3.34	0.00****
Minority	43.23	36.81	
Nonminority female	0.61	7.78	7.86****
M/WBE total	43.84	44.59	98.32
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.47	0.00****
Hispanic	7.71	17.42	44.25****
Asian	0.22	0.09	
Native American	0.00	0.04	0.00
Minority	7.93	20.03	39.59****
Nonminority female	5.61	10.43	53.83
M/WBE total	13.54	30.46	44.47****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	1.62	16.09	10.08****
Hispanic	0.14	0.69	20.85
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.77	16.79	10.52****
Nonminority female	12.11	9.89	
M/WBE total	13.87	26.68	52.01
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00****
Nonminority female	0.00	11.41	0.00****
M/WBE total	0.00	22.83	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	33.95	4.90	
M/WBE total	33.95	13.62	
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	21.76	5.80	
Asian	0.14	10.94	1.25****
Native American	0.00	0.00	
Minority	21.89	16.74	
Nonminority female	3.40	11.15	30.52
M/WBE total	25.30	27.89	90.69
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	5.99	1.75	
Hispanic	0.00	8.75	0.00****
Asian	0.00	2.45	0.00****
Native American	0.00	1.07	0.00****
Minority	5.99	14.02	42.71***
Nonminority female	6.88	14.87	46.27**
M/WBE total	12.87	28.88	44.54****
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	40.45	12.95	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	40.45	12.95	
Nonminority female	0.00	0.00	
M/WBE total	40.45	12.95	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	6.40	1.64	
Hispanic	11.07	7.87	
Asian	7.49	3.07	
Native American	0.21	0.80	26.11**
Minority	25.16	13.37	
Nonminority female	9.30	7.29	
M/WBE total	34.46	20.66	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00****
Hispanic	99.47	6.37	
Asian	0.00	2.68	0.00****
Native American	0.00	1.34	0.00**
Minority	99.47	13.63	
Nonminority female	0.52	11.51	4.55****
M/WBE total	99.99	25.13	
Building Finishing Contractors (NAICS 2383)			
African American	0.06	2.45	2.46****
Hispanic	2.98	32.97	9.03****
Asian	3.26	0.89	
Native American	0.00	2.29	0.00****
Minority	6.30	38.60	16.31****
Nonminority female	15.63	10.35	
M/WBE total	21.92	48.95	44.79****
Residential Building Construction (NAICS 2361)			
African American	5.13	0.47	
Hispanic	65.21	15.28	
Asian	0.00	0.00	
Native American	0.29	0.04	
Minority	70.63	15.79	
Nonminority female	6.04	10.16	59.48
M/WBE total	76.68	25.95	
Services to Buildings and Dwellings (NAICS 5617)			
African American	45.31	0.30	
Hispanic	6.38	18.93	33.73
Asian	0.03	0.15	19.23
Native American	0.00	0.15	0.00
Minority	51.72	19.53	
Nonminority female	5.77	7.22	79.84
M/WBE total	57.49	26.75	
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00****
Nonminority female	0.00	11.09	0.00****
M/WBE total	0.00	23.35	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	20.38	7.00	
M/WBE total	20.38	7.00	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.21	0.00****
Hispanic	1.69	12.22	13.83****
Asian	37.86	10.54	
Native American	0.00	0.00	
Minority	39.55	24.97	
Nonminority female	3.08	11.65	26.42***
M/WBE total	42.62	36.62	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00****
Nonminority female	2.60	2.75	94.46
M/WBE total	2.60	11.62	22.37
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	20.11	0.96	
Asian	0.00	0.73	0.00
Native American	0.00	0.00	
Minority	20.11	1.69	
Nonminority female	0.00	18.68	0.00****
M/WBE total	20.11	20.37	98.72
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.47	0.00****
Hispanic	14.11	12.60	
Asian	0.00	0.17	0.00
Native American	0.00	0.66	0.00
Minority	14.11	18.89	74.68
Nonminority female	7.40	8.23	89.90
M/WBE total	21.51	27.13	79.30

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.03	3.79	0.68*
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.03	13.80	0.19****
Nonminority female	9.57	36.16	26.48****
M/WBE total	9.60	49.96	19.22****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	2.63	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	2.63	16.67	15.77**
Nonminority female	3.90	11.11	35.10
M/WBE total	6.53	27.78	23.50***
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00****
Asian	99.33	2.03	
Native American	0.00	0.00	
Minority	99.33	6.49	
Nonminority female	0.67	7.25	9.20**
M/WBE total	100.00	13.74	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	99.54	10.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	99.54	10.00	
Nonminority female	0.00	10.00	0.00****
M/WBE total	99.54	20.00	
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.76	2.99	25.43
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.76	5.97	12.72
Nonminority female	0.00	10.15	0.00*
M/WBE total	0.76	16.12	4.71*

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00***
Asian	0.00	9.49	0.00***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00****
Nonminority female	0.00	18.97	0.00****
M/WBE total	0.00	37.94	0.00****
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00****
Hispanic	0.00	0.98	0.00****
Asian	0.00	3.25	0.00****
Native American	0.00	0.29	0.00***
Minority	0.00	5.94	0.00****
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	12.50	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	12.50	0.00****
Nonminority female	0.00	0.00	
M/WBE total	0.00	12.50	0.00****
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00****
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00****
Nonminority female	0.19	9.85	1.89****
M/WBE total	0.19	14.42	1.29****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	74.37	0.34	
Hispanic	9.72	1.28	
Asian	4.37	0.38	
Native American	0.00	0.05	0.00
Minority	88.47	2.05	
Nonminority female	8.76	3.59	
M/WBE total	97.23	5.64	
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	4.04	0.00**
Hispanic	63.15	8.96	
Asian	0.00	2.02	0.00**
Native American	0.00	0.00	
Minority	63.15	15.03	
Nonminority female	0.00	5.49	0.00****
M/WBE total	63.15	20.51	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	2.49	15.04	16.54
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	2.49	19.86	12.52
Nonminority female	23.69	14.19	
M/WBE total	26.18	34.05	76.88
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	4.71	2.94	
Hispanic	7.34	0.79	
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	12.05	5.11	
Nonminority female	61.15	22.51	
M/WBE total	73.20	27.62	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	6.03	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.03	0.00****
Nonminority female	59.23	0.00	
M/WBE total	59.23	6.03	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00****
Nonminority female	89.18	16.67	
M/WBE total	89.18	25.00	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	12.37	0.00	
Hispanic	17.57	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	29.93	13.27	
Nonminority female	7.91	9.26	85.41
M/WBE total	37.84	22.53	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	6.22	7.05	88.24
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	6.22	14.10	44.12
Nonminority female	93.78	43.59	
M/WBE total	100.00	57.69	
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	4.61	7.69	59.97
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	4.61	7.69	59.97
Nonminority female	0.00	0.00	
M/WBE total	4.61	7.69	59.97
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	15.31	4.34	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	15.31	4.34	
Nonminority female	4.57	7.74	59.06
M/WBE total	19.88	12.08	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.68	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.68	0.88	77.17
Nonminority female	85.40	1.07	
M/WBE total	86.08	1.95	
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	0.96	0.00
Hispanic	24.61	5.84	
Asian	0.00	1.44	0.00****
Native American	0.00	0.00	
Minority	24.61	8.24	
Nonminority female	22.52	9.13	
M/WBE total	47.13	17.38	
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Insurance Carriers (NAICS 5241)			
African American	0.00	0.75	0.00
Hispanic	0.00	9.70	0.00****
Asian	0.00	9.70	0.00****
Native American	0.00	0.00	
Minority	0.00	20.15	0.00****
Nonminority female	0.00	15.17	0.00****
M/WBE total	0.00	35.32	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	84.08	1.79	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	84.08	1.79	
Nonminority female	13.07	39.29	33.28***
M/WBE total	97.16	41.07	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00****
Asian	0.00	20.07	0.00****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00****
Nonminority female	100.00	1.09	
M/WBE total	100.00	41.56	

Source and Notes: See Table 6.8.

Table AD.3. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	3.78	1.66	
Hispanic	12.18	7.14	
Asian	9.47	3.03	
Native American	0.03	0.60	4.88****
Minority	25.46	12.43	
Nonminority female	14.77	6.87	
M/WBE total	40.23	19.31	
Nonresidential Building Construction (NAICS 2362)			
African American	1.21	0.22	
Hispanic	0.54	8.24	6.50****
Asian	0.00	0.09	2.86
Native American	0.00	0.08	0.00
Minority	1.75	8.62	20.31**
Nonminority female	0.04	16.05	0.24****
M/WBE total	1.79	24.67	7.25****
Building Equipment Contractors (NAICS 2382)			
African American	1.46	1.17	
Hispanic	76.62	7.54	
Asian	3.41	0.86	
Native American	0.04	0.25	16.32
Minority	81.53	9.82	
Nonminority female	1.49	7.35	20.33****
M/WBE total	83.02	17.17	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	4.26	3.03	
Hispanic	8.43	4.59	
Asian	0.98	3.41	28.71
Native American	0.00	0.08	0.00
Minority	13.66	11.10	
Nonminority female	45.77	19.07	
M/WBE total	59.43	30.17	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.06	7.69	0.75****
Asian	10.41	0.00	
Native American	0.00	0.00	
Minority	10.47	7.69	
Nonminority female	0.04	12.08	0.30****
M/WBE total	10.51	19.77	53.14***

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00****
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.04	9.15	0.40****
M/WBE total	0.04	20.92	0.17****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.74	0.00****
Hispanic	5.14	17.32	29.71****
Asian	0.00	0.11	0.00**
Native American	0.00	0.05	0.00
Minority	5.14	20.23	25.43****
Nonminority female	2.69	10.27	26.23****
M/WBE total	7.84	30.50	25.70****
Legal Services (NAICS 5411)			
African American	1.02	0.71	
Hispanic	0.01	1.19	1.09
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	1.03	1.98	52.27
Nonminority female	19.61	13.38	
M/WBE total	20.65	15.36	
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	5.77	4.90	
M/WBE total	5.77	13.62	42.38
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	7.63	2.79	
Hispanic	0.00	10.48	0.00****
Asian	0.00	3.21	0.00****
Native American	0.00	2.76	0.00****
Minority	7.63	19.24	39.66****
Nonminority female	14.27	22.24	64.15*
M/WBE total	21.90	41.48	52.79****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	0.00	4.43	0.00****
Hispanic	1.39	6.09	22.82
Asian	0.00	2.13	0.00
Native American	0.00	1.06	0.00
Minority	1.39	13.70	10.14***
Nonminority female	33.46	16.17	
M/WBE total	34.85	29.87	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	6.47	0.00	
Hispanic	4.49	6.64	67.60
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	10.96	13.27	82.56
Nonminority female	0.00	9.26	0.00****
M/WBE total	10.96	22.53	48.63*
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	3.51	0.56	
Hispanic	7.68	13.42	57.24**
Asian	0.00	0.53	0.00****
Native American	0.00	0.96	0.00****
Minority	11.20	15.48	72.33
Nonminority female	10.18	12.94	78.70
M/WBE total	21.38	28.42	75.23**
Residential Building Construction (NAICS 2361)			
African American	10.36	0.47	
Hispanic	89.05	15.28	
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	99.41	15.79	
Nonminority female	0.00	10.16	0.00****
M/WBE total	99.41	25.95	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.38	0.00****
Hispanic	0.00	29.44	0.00****
Asian	0.00	2.11	0.00****
Native American	0.00	1.35	0.00****
Minority	0.00	34.28	0.00****
Nonminority female	30.78	9.99	
M/WBE total	30.78	44.27	69.52*

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.55	5.80	9.54**
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	0.55	16.74	3.30****
Nonminority female	0.00	11.15	0.00****
M/WBE total	0.55	27.89	1.98****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.54	11.88	4.54****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00****
Minority	0.54	17.86	3.02****
Nonminority female	22.81	14.68	
M/WBE total	23.35	32.54	71.75*
Remediation and Other Waste Management Services (NAICS 5629)			
African American	96.04	28.57	
Hispanic	1.18	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	97.22	28.57	
Nonminority female	1.94	14.29	13.56***
M/WBE total	99.16	42.86	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	8.44	0.00****
Asian	0.00	0.00	
Native American	0.00	8.44	0.00****
Minority	0.00	16.88	0.00****
Nonminority female	0.00	15.58	0.00****
M/WBE total	0.00	32.47	0.00****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00****
Hispanic	0.00	11.94	0.00****
Asian	72.02	11.94	
Native American	0.00	0.00	
Minority	72.02	26.39	
Nonminority female	23.88	13.19	
M/WBE total	95.90	39.58	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
General Freight Trucking (NAICS 4841)			
African American	78.97	11.44	
Hispanic	21.03	21.69	96.96
Asian	0.00	0.34	0.00*
Native American	0.00	3.34	0.00****
Minority	100.00	36.81	
Nonminority female	0.00	7.78	0.00****
M/WBE total	100.00	44.59	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.00	
Hispanic	92.84	1.08	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	92.84	1.08	
Nonminority female	7.16	1.08	
M/WBE total	100.00	2.15	
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	73.45	10.71	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	73.45	25.51	
Nonminority female	0.00	7.14	0.00****
M/WBE total	73.45	32.65	
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	0.93	0.00
Hispanic	0.00	4.10	0.00
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	5.26	0.00****
Nonminority female	0.00	8.46	0.00****
M/WBE total	0.00	13.72	0.00****
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	1.10	7.97	13.83
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	1.10	15.95	6.91**
Nonminority female	0.00	23.51	0.00****
M/WBE total	1.10	39.46	2.79****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Investigation and Security Services (NAICS 5616)			
African American	9.13	5.33	
Hispanic	84.60	11.40	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	93.73	16.73	
Nonminority female	1.72	14.47	11.87**
M/WBE total	95.45	31.20	
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	41.03	1.68	
Hispanic	29.10	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	70.14	9.87	
Nonminority female	14.39	28.38	50.72
M/WBE total	84.53	38.25	
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00****
Hispanic	0.00	6.86	0.00****
Asian	0.00	1.60	0.00****
Native American	0.00	0.00	
Minority	0.00	13.38	0.00****
Nonminority female	0.00	19.01	0.00****
M/WBE total	0.00	32.39	0.00****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.96	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.96	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.96	0.00	
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	0.00	2.34	0.00****
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00****
Nonminority female	89.03	11.53	
M/WBE total	89.03	15.13	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	5.48	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00****
Nonminority female	0.00	21.90	0.00****
M/WBE total	0.00	27.38	0.00****
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	91.43	43.59	
M/WBE total	91.43	57.69	
Services to Buildings and Dwellings (NAICS 5617)			
African American	16.83	0.30	
Hispanic	77.79	18.93	
Asian	0.00	0.15	0.00**
Native American	0.00	0.15	0.00**
Minority	94.61	19.53	
Nonminority female	1.32	7.22	18.25*
M/WBE total	95.93	26.75	
Office Administrative Services (NAICS 5611)			
African American	0.00	0.36	0.00
Hispanic	100.00	4.05	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	100.00	4.70	
Nonminority female	0.00	8.68	0.00
M/WBE total	100.00	13.38	
Specialized Design Services (NAICS 5414)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.00	1.06	0.00
Nonminority female	68.44	63.45	
M/WBE total	68.44	64.52	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Computer Systems Design and Related Services (NAICS 5415)			
African American	2.14	1.68	
Hispanic	84.18	15.52	
Asian	5.93	2.86	
Native American	0.00	0.13	0.00
Minority	92.25	20.19	
Nonminority female	0.11	7.26	1.51****
M/WBE total	92.36	27.45	
Business Support Services (NAICS 5614)			
African American	15.99	2.38	
Hispanic	68.78	8.84	
Asian	1.21	0.00	
Native American	0.00	6.46	0.00****
Minority	85.98	17.69	
Nonminority female	13.32	24.15	55.17
M/WBE total	99.31	41.84	
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00****
M/WBE total	0.00	10.71	0.00****
Other Support Services (NAICS 5619)			
African American	30.74	0.27	
Hispanic	16.92	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	47.66	0.88	
Nonminority female	24.26	1.07	
M/WBE total	71.92	1.95	
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	11.11	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	34.87	17.39	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	34.87	17.39	
Nonminority female	0.00	0.00	
M/WBE total	34.87	17.39	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00****
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00****
Nonminority female	1.45	14.19	10.19
M/WBE total	1.45	34.05	4.25****

Source and Notes: See Table 6.8.

Table AD.4. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	4.34	1.66	
Hispanic	13.51	7.21	
Asian	9.29	3.01	
Native American	0.03	0.61	5.57****
Minority	27.17	12.49	
Nonminority female	15.22	7.04	
M/WBE total	42.39	19.53	
Nonresidential Building Construction (NAICS 2362)			
African American	1.15	0.21	
Hispanic	0.67	8.24	8.11****
Asian	0.00	0.09	0.00
Native American	0.00	0.07	0.00
Minority	1.81	8.61	21.07***
Nonminority female	0.03	16.07	0.17****
M/WBE total	1.84	24.68	7.46****
Building Equipment Contractors (NAICS 2382)			
African American	1.85	1.16	
Hispanic	75.70	7.53	
Asian	3.34	0.87	
Native American	0.00	0.25	0.00****
Minority	80.89	9.81	
Nonminority female	1.49	7.35	20.29****
M/WBE total	82.38	17.15	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	4.62	3.00	
Hispanic	10.87	5.20	
Asian	1.06	3.69	28.81*
Native American	0.00	0.09	0.00
Minority	16.56	11.98	
Nonminority female	46.96	18.51	
M/WBE total	63.52	30.49	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	7.69	0.00****
Asian	8.78	0.00	
Native American	0.00	0.00	
Minority	8.78	7.69	
Nonminority female	0.04	12.08	0.30****
M/WBE total	8.81	19.77	44.58****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00***
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.03	9.15	0.37****
M/WBE total	0.03	20.92	0.16****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.82	0.00****
Hispanic	4.74	17.29	27.45****
Asian	0.00	0.12	0.00
Native American	0.00	0.06	0.00
Minority	4.74	20.28	23.39****
Nonminority female	3.44	10.23	33.59****
M/WBE total	8.18	30.51	26.81****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	4.03	4.90	82.19
M/WBE total	4.03	13.62	29.59**
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	7.26	0.00	
Hispanic	3.43	6.64	51.67
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	10.69	13.27	80.54
Nonminority female	0.00	9.26	0.00****
M/WBE total	10.69	22.53	47.44*
Residential Building Construction (NAICS 2361)			
African American	7.46	0.47	
Hispanic	82.40	15.28	
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	89.86	15.79	
Nonminority female	8.01	10.16	78.89
M/WBE total	97.87	25.95	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	4.17	0.57	
Hispanic	9.12	13.19	69.15
Asian	0.00	0.54	0.00****
Native American	0.00	0.92	0.00****
Minority	13.29	15.22	87.33
Nonminority female	11.32	12.71	89.13
M/WBE total	24.61	27.92	88.15
Employment Services (NAICS 5613)			
African American	0.00	5.07	0.00****
Hispanic	1.86	5.94	31.39
Asian	0.00	1.83	0.00**
Native American	0.00	0.91	0.00**
Minority	1.86	13.75	13.57**
Nonminority female	51.71	18.67	
M/WBE total	53.57	32.42	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.31	0.00****
Hispanic	0.00	29.10	0.00****
Asian	0.00	2.18	0.00****
Native American	0.00	1.28	0.00****
Minority	0.00	33.87	0.00****
Nonminority female	22.53	9.98	
M/WBE total	22.53	43.85	51.37****
General Freight Trucking (NAICS 4841)			
African American	67.35	11.44	
Hispanic	32.65	21.69	
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00****
Minority	100.00	36.81	
Nonminority female	0.00	7.78	0.00****
M/WBE total	100.00	44.59	
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.22	11.88	1.85****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00****
Minority	0.22	17.86	1.23****
Nonminority female	23.32	14.68	
M/WBE total	23.54	32.54	72.33**

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00****
Hispanic	0.00	11.94	0.00****
Asian	69.79	11.94	
Native American	0.00	0.00	
Minority	69.79	26.39	
Nonminority female	26.29	13.19	
M/WBE total	96.08	39.58	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	0.27	0.00
Hispanic	0.00	5.20	0.00****
Asian	0.00	0.57	0.00***
Native American	0.00	2.57	0.00****
Minority	0.00	8.61	0.00****
Nonminority female	36.05	11.29	
M/WBE total	36.05	19.90	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	8.44	0.00****
Asian	0.00	0.00	
Native American	0.00	8.44	0.00****
Minority	0.00	16.88	0.00****
Nonminority female	0.00	15.58	0.00****
M/WBE total	0.00	32.47	0.00****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	95.73	28.57	
Hispanic	0.70	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.43	28.57	
Nonminority female	2.81	14.29	19.69***
M/WBE total	99.24	42.86	
Legal Services (NAICS 5411)			
African American	4.20	0.71	
Hispanic	0.05	1.19	4.48
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	4.26	1.98	
Nonminority female	16.19	13.38	
M/WBE total	20.44	15.36	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.00	
Hispanic	93.47	1.08	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	93.47	1.08	
Nonminority female	6.53	1.08	
M/WBE total	100.00	2.15	
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	0.93	0.00
Hispanic	0.00	4.10	0.00
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	5.26	0.00****
Nonminority female	0.00	8.46	0.00****
M/WBE total	0.00	13.72	0.00****
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	43.43	1.68	
Hispanic	24.81	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	68.24	9.87	
Nonminority female	15.35	28.38	54.10
M/WBE total	83.60	38.25	
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00****
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00****
Nonminority female	0.00	11.15	0.00****
M/WBE total	0.00	27.89	0.00****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.96	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.96	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.96	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	92.69	43.59	
M/WBE total	92.69	57.69	
Individual and Family Services (NAICS 6241)			
African American	0.00	5.48	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00****
Nonminority female	0.00	21.90	0.00****
M/WBE total	0.00	27.38	0.00****
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00*
Hispanic	0.00	2.34	0.00****
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00****
Nonminority female	82.91	11.53	
M/WBE total	82.91	15.13	
Services to Buildings and Dwellings (NAICS 5617)			
African American	21.24	0.30	
Hispanic	73.68	18.93	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	94.93	19.53	
Nonminority female	1.24	7.22	17.19
M/WBE total	96.17	26.75	
Office Administrative Services (NAICS 5611)			
African American	0.00	0.36	0.00
Hispanic	100.00	4.05	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	100.00	4.70	
Nonminority female	0.00	8.68	0.00*
M/WBE total	100.00	13.38	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	2.04	7.97	25.56
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	2.04	15.95	12.78*
Nonminority female	0.00	23.51	0.00****
M/WBE total	2.04	39.46	5.17****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	38.63	10.71	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	38.63	25.51	
Nonminority female	0.00	7.14	0.00****
M/WBE total	38.63	32.65	
Specialized Design Services (NAICS 5414)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.00	1.06	0.00
Nonminority female	88.04	63.45	
M/WBE total	88.04	64.52	
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	30.34	17.39	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	30.34	17.39	
Nonminority female	0.00	0.00	
M/WBE total	30.34	17.39	
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.77	1.68	46.20
Hispanic	84.32	15.52	
Asian	6.43	2.86	
Native American	0.00	0.13	0.00
Minority	91.52	20.19	
Nonminority female	0.57	7.26	7.85****
M/WBE total	92.09	27.45	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	11.11	0.00
Investigation and Security Services (NAICS 5616)			
African American	75.18	5.33	
Hispanic	6.94	11.40	60.85
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	82.12	16.73	
Nonminority female	3.18	14.47	21.99
M/WBE total	85.30	31.20	

Source and Notes: See Table 6.8.

**Table AD.5. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting (Dollars Awarded)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.55	0.00 **
Hispanic	0.00	2.47	0.00 **
Asian	0.00	0.50	0.00
Native American	0.00	0.00	
Minority	0.00	5.52	0.00 ****
Nonminority female	0.10	8.82	1.13 ****
M/WBE total	0.10	14.33	0.70 ****
Nonresidential Building Construction (NAICS 2362)			
African American	0.79	2.30	34.39
Hispanic	1.87	7.32	25.49
Asian	0.65	0.93	70.52
Native American	0.00	0.80	0.00 ****
Minority	3.31	11.35	29.19
Nonminority female	1.64	10.16	16.18 ****
M/WBE total	4.96	21.51	23.04 ****
Business Support Services (NAICS 5614)			
African American	0.33	3.57	9.14
Hispanic	1.99	3.82	52.20
Asian	0.00	0.24	0.77
Native American	0.00	0.04	0.00
Minority	2.32	7.67	30.26
Nonminority female	7.13	9.99	71.35
M/WBE total	9.45	17.66	53.52
Building Equipment Contractors (NAICS 2382)			
African American	8.29	1.07	
Hispanic	10.79	6.64	
Asian	0.35	1.39	25.30
Native American	0.00	0.25	0.00 ****
Minority	19.43	9.36	
Nonminority female	1.41	6.79	20.76 ****
M/WBE total	20.84	16.15	
Services to Buildings and Dwellings (NAICS 5617)			
African American	9.19	0.52	
Hispanic	4.47	18.19	24.55 **
Asian	0.41	0.25	
Native American	0.00	0.14	0.00 **
Minority	14.07	19.11	73.66
Nonminority female	0.64	7.20	8.82 ****
M/WBE total	14.71	26.31	55.91

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.15	1.55	9.41 ***
Hispanic	0.38	9.30	4.05 ****
Asian	4.28	2.99	
Native American	0.40	0.19	
Minority	5.20	14.03	37.04 ****
Nonminority female	38.98	11.32	
M/WBE total	44.18	25.35	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	3.30	1.69	
Hispanic	6.86	7.84	87.42
Asian	2.00	3.61	55.50 **
Native American	0.58	0.70	82.70
Minority	12.74	13.84	92.05
Nonminority female	9.20	8.32	
M/WBE total	21.95	22.16	99.03
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.36	0.00 ****
Hispanic	0.00	4.69	0.00 ****
Asian	9.88	1.09	
Native American	0.00	0.00	
Minority	9.88	9.15	
Nonminority female	0.00	13.98	0.00 ****
M/WBE total	9.88	23.13	42.73
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.50	0.57	87.85
Hispanic	0.78	5.13	15.16
Asian	8.08	2.27	
Native American	0.00	0.00	
Minority	9.35	7.97	
Nonminority female	8.37	32.40	25.83 **
M/WBE total	17.72	40.36	43.91 *
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.42	0.00
Asian	0.00	0.42	0.00
Native American	0.00	0.00	
Minority	0.00	0.85	0.00 **
Nonminority female	0.17	0.75	22.79
M/WBE total	0.17	1.60	10.72

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	2.01	0.00 ****
Hispanic	1.24	7.87	15.79 ****
Asian	52.89	7.29	
Native American	0.00	3.76	0.00 ****
Minority	54.14	20.94	
Nonminority female	8.03	8.10	99.17
M/WBE total	62.17	29.03	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	9.13	5.27	
Hispanic	15.36	6.59	
Asian	0.00	6.68	0.00 ****
Native American	0.00	0.27	0.00
Minority	24.49	18.82	
Nonminority female	7.76	17.51	44.29 ****
M/WBE total	32.25	36.33	88.76
Other Personal Services (NAICS 8129)			
African American	0.00	2.96	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00 ****
Nonminority female	0.00	9.41	0.00 ****
M/WBE total	0.00	17.26	0.00 ****
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	9.53	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.53	0.00 ****
Nonminority female	0.76	0.36	
M/WBE total	0.76	9.89	7.69 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 **
Hispanic	0.00	1.05	0.00 **
Asian	3.44	13.53	25.40 ****
Native American	0.00	0.00	
Minority	3.44	15.77	21.79 ****
Nonminority female	0.99	5.04	19.71 ***
M/WBE total	4.43	20.81	21.29 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	4.61	4.74	97.38
Hispanic	3.87	6.02	64.36
Asian	1.14	1.98	57.62
Native American	0.00	0.99	0.00
Minority	9.63	13.73	70.15
Nonminority female	22.12	17.39	
M/WBE total	31.75	31.11	
Individual and Family Services (NAICS 6241)			
African American	0.51	5.87	8.61 ****
Hispanic	0.91	2.99	30.48 ***
Asian	0.00	0.54	0.00
Native American	0.00	0.00	
Minority	1.42	9.40	15.07 ****
Nonminority female	0.04	27.03	0.14 ****
M/WBE total	1.45	36.43	3.99 ****
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.24	0.00 ****
Hispanic	10.16	11.20	90.73
Asian	0.01	0.03	45.77
Native American	0.00	0.00	
Minority	10.17	16.46	61.80
Nonminority female	9.90	14.48	68.38
M/WBE total	20.07	30.94	64.88
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	1.96	14.19	13.79
M/WBE total	1.96	34.05	5.75 ****
Other Telecommunications (NAICS 5179)			
African American	0.00	2.06	0.00 ****
Hispanic	0.00	1.84	0.00 ****
Asian	0.00	0.01	0.00
Native American	0.00	3.04	0.00 ****
Minority	0.00	6.96	0.00 ****
Nonminority female	0.00	3.12	0.00 ****
M/WBE total	0.00	10.09	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	11.11	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.22	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	22.22	0.00 ****
Activities Related to Credit Intermediation (NAICS 5223)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	9.29	0.00
Native American	0.00	8.01	0.00
Minority	0.00	17.31	0.00
Nonminority female	0.00	10.58	0.00
M/WBE total	0.00	27.88	0.00 ****
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	1.28	9.09	14.04
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.28	9.09	14.04
Nonminority female	0.47	9.09	5.12
M/WBE total	1.74	18.18	9.58 *
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.75	0.00
M/WBE total	0.00	0.75	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.12	0.00
Hispanic	24.23	6.31	
Asian	0.00	5.19	0.00 ****
Native American	0.00	0.94	0.00 ****
Minority	24.23	12.57	
Nonminority female	0.00	8.94	0.00 ****
M/WBE total	24.23	21.51	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	1.18	11.88	9.96 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	1.18	17.86	6.63 ****
Nonminority female	21.72	14.68	
M/WBE total	22.91	32.54	70.39 **
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	1.82	0.00 ****
Hispanic	0.00	8.00	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.82	0.00 ****
Nonminority female	0.00	17.31	0.00 ****
M/WBE total	0.00	27.13	0.00 ****
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)			
African American	4.06	1.30	
Hispanic	6.52	1.75	
Asian	3.58	0.90	
Native American	0.00	0.00	
Minority	14.16	3.94	
Nonminority female	0.00	10.38	0.00 ****
M/WBE total	14.16	14.33	98.81
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	1.94	0.83	
Hispanic	7.52	13.20	56.95 **
Asian	0.07	0.78	8.45 ***
Native American	0.00	1.28	0.00 ****
Minority	9.53	16.09	59.22 **
Nonminority female	30.85	12.78	
M/WBE total	40.37	28.87	
Religious Organizations (NAICS 8131)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	0.06	0.00
Asian	0.00	3.68	0.00
Native American	0.00	0.00	
Minority	0.00	9.23	0.00 ****
Nonminority female	0.00	18.35	0.00 ****
M/WBE total	0.00	27.58	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	1.46	10.94	13.30 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.46	10.94	13.30 ****
Nonminority female	4.78	11.73	40.80 ***
M/WBE total	6.24	22.67	27.53 ****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.07	5.42	1.35 ****
Hispanic	10.33	16.27	63.50
Asian	0.00	0.34	0.00 ****
Native American	0.00	0.16	0.00 **
Minority	10.40	22.19	46.87 ****
Nonminority female	4.86	8.74	55.57
M/WBE total	15.26	30.94	49.33 ****
Vocational Rehabilitation Services (NAICS 6243)			
African American	0.00	2.13	0.00 **
Hispanic	0.00	11.79	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	13.92	0.00 ****
Nonminority female	0.00	8.90	0.00 ****
M/WBE total	0.00	22.82	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	9.79	0.00	
Hispanic	5.79	7.40	78.24
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	15.58	7.40	
Nonminority female	0.16	8.60	1.90 ****
M/WBE total	15.74	16.00	98.41
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)			
African American	0.00	0.00	
Hispanic	0.00	5.09	0.00
Asian	0.00	21.92	0.00 ****
Native American	0.00	0.00	
Minority	0.00	27.01	0.00 ****
Nonminority female	0.00	15.99	0.00
M/WBE total	0.00	43.00	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.08	0.90	9.16
Hispanic	0.03	3.80	0.75
Asian	4.18	2.35	
Native American	0.00	0.00	
Minority	4.29	7.06	60.78
Nonminority female	0.24	16.89	1.42
M/WBE total	4.53	23.95	18.92
Residential Building Construction (NAICS 2361)			
African American	25.56	1.23	
Hispanic	7.16	16.19	44.21 *
Asian	0.00	1.20	0.00 **
Native American	0.00	0.03	0.00
Minority	32.72	18.64	
Nonminority female	28.80	11.83	
M/WBE total	61.52	30.47	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.75	0.66	
Hispanic	0.00	6.77	0.04 ****
Asian	0.00	1.13	0.00 ****
Native American	0.00	5.15	0.00 ****
Minority	0.75	13.72	5.47 ****
Nonminority female	6.72	12.40	54.17 *
M/WBE total	7.47	26.11	28.59 ****
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00 ****
Nonminority female	0.00	11.41	0.00 ****
M/WBE total	0.00	22.83	0.00 ****
Automotive Repair and Maintenance (NAICS 8111)			
African American	1.19	1.02	
Hispanic	6.06	10.84	55.85
Asian	15.36	0.75	
Native American	8.73	0.67	
Minority	31.34	13.27	
Nonminority female	27.91	12.53	
M/WBE total	59.25	25.80	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Finishing Contractors (NAICS 2383)			
African American	6.61	2.21	
Hispanic	46.86	25.66	
Asian	0.00	0.44	0.00 *
Native American	0.00	1.68	0.00 ****
Minority	53.47	29.99	
Nonminority female	1.31	11.20	11.68 ****
M/WBE total	54.78	41.18	
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00
Asian	0.00	15.25	0.00
Native American	0.00	0.00	
Minority	0.00	22.05	0.00 ****
Nonminority female	0.08	11.83	0.65
M/WBE total	0.08	33.87	0.23
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	3.21	9.80	32.75
Asian	66.10	1.96	
Native American	0.00	0.00	
Minority	69.31	11.76	
Nonminority female	5.45	9.15	59.54
M/WBE total	74.76	20.92	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00 ****
Hispanic	0.21	11.94	1.77 ****
Asian	27.77	11.94	
Native American	0.09	0.00	
Minority	28.07	26.39	
Nonminority female	0.01	13.19	0.10 ****
M/WBE total	28.09	39.58	70.95
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Schools and Instruction (NAICS 6116)			
African American	0.00	5.72	0.00 ****
Hispanic	44.89	13.47	
Asian	0.00	2.94	0.00 ****
Native American	0.00	0.00	
Minority	44.89	22.12	
Nonminority female	0.00	25.09	0.00 ****
M/WBE total	44.89	47.21	95.09
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	3.41	0.00
Asian	0.00	2.73	0.00
Native American	0.00	0.00	
Minority	0.00	6.14	0.00
Nonminority female	0.00	8.12	0.00
M/WBE total	0.00	14.25	0.00 ****
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00
Hispanic	0.00	6.25	0.00
Asian	0.00	6.25	0.00
Native American	0.00	6.25	0.00
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	12.50	0.00
M/WBE total	0.00	37.50	0.00 ****
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	0.00	20.61	0.00 ****
M/WBE total	0.00	65.75	0.00 ****
Radio and Television Broadcasting (NAICS 5151)			
African American	5.92	0.00	
Hispanic	0.00	8.05	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	5.92	8.05	73.44
Nonminority female	0.00	3.30	0.00
M/WBE total	5.92	11.35	52.11

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.32	3.45	9.16 ***
Hispanic	23.77	11.71	
Asian	0.37	4.96	7.48 ****
Native American	0.00	0.01	0.00
Minority	24.45	20.14	
Nonminority female	43.65	29.66	
M/WBE total	68.10	49.80	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	4.19	0.00 ****
Asian	0.00	0.11	0.00
Native American	0.00	0.00	
Minority	0.00	4.30	0.00 ****
Nonminority female	0.14	9.14	1.48 **
M/WBE total	0.14	13.45	1.01 ****
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	0.00	7.97	0.00
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	0.00	15.95	0.00 ****
Nonminority female	20.04	23.51	85.23
M/WBE total	20.04	39.46	50.79 **
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	8.53	50.00	17.07 ****
M/WBE total	8.53	50.00	17.07 ****
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	0.00	1.19	0.00 **
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	0.00	1.98	0.00 **
Nonminority female	0.00	13.38	0.00 ****
M/WBE total	0.00	15.36	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00 ****
Asian	1.87	4.00	46.64
Native American	0.00	0.00	
Minority	1.87	12.80	14.57
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	1.87	27.60	6.76 ****
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
General Freight Trucking (NAICS 4841)			
African American	61.95	11.44	
Hispanic	28.71	21.69	
Asian	0.79	0.34	
Native American	8.24	3.34	
Minority	99.69	36.81	
Nonminority female	0.13	7.78	1.73 ****
M/WBE total	99.83	44.59	
Offices of Other Health Practitioners (NAICS 6213)			
African American	0.73	0.14	
Hispanic	0.19	0.00	
Asian	0.04	4.49	0.85 **
Native American	0.00	1.18	0.00
Minority	0.96	5.82	16.56
Nonminority female	0.08	53.94	0.15 ****
M/WBE total	1.04	59.75	1.75 ****
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)			
African American	0.00	3.97	0.00
Hispanic	0.00	15.37	0.00 ****
Asian	0.00	5.12	0.00
Native American	0.00	0.00	
Minority	0.00	24.46	0.00 ****
Nonminority female	0.00	12.80	0.00 ****
M/WBE total	0.00	37.26	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Child Day Care Services (NAICS 6244)			
African American	0.00	1.13	0.00
Hispanic	0.00	1.91	0.00
Asian	0.00	0.69	0.00
Native American	0.00	0.13	0.00
Minority	0.00	3.86	0.00
Nonminority female	0.00	8.82	0.00 ****
M/WBE total	0.00	12.68	0.00 ****
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.00	
Hispanic	0.00	14.80	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.80	0.00 ****
Nonminority female	0.00	3.31	0.00 ****
M/WBE total	0.00	18.11	0.00 ****
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00 ****
M/WBE total	0.00	48.18	0.00 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	100.00	7.00	
M/WBE total	100.00	7.00	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00 ****
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00 ****
M/WBE total	100.00	13.74	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Special Food Services (NAICS 7223)			
African American	0.00	11.81	0.00
Hispanic	19.88	3.46	
Asian	0.00	0.09	0.00
Native American	0.00	0.00	
Minority	19.88	15.35	
Nonminority female	0.00	13.04	0.00
M/WBE total	19.88	28.39	70.03
Social Advocacy Organizations (NAICS 8133)			
African American	0.00	0.55	0.00
Hispanic	0.00	2.71	0.00
Asian	0.00	1.26	0.00
Native American	0.00	0.00	
Minority	0.00	4.53	0.00
Nonminority female	0.00	5.06	0.00
M/WBE total	0.00	9.59	0.00
Medical and Diagnostic Laboratories (NAICS 6215)			
African American	0.00	0.00	
Hispanic	0.00	1.32	0.00
Asian	0.00	1.32	0.00
Native American	0.00	0.00	
Minority	0.00	2.63	0.00
Nonminority female	0.00	3.95	0.00
M/WBE total	0.00	6.58	0.00 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.62	0.00 *
Hispanic	1.63	3.45	47.32
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	1.63	7.52	21.69 **
Nonminority female	0.24	6.02	4.03 ****
M/WBE total	1.87	13.54	13.84 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.75	0.00
Hispanic	0.00	3.73	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.00	
Minority	0.00	4.73	0.00
Nonminority female	0.00	7.71	0.00
M/WBE total	0.00	12.44	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	3.28	2.34	
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	3.28	3.59	91.13
Nonminority female	56.42	11.53	
M/WBE total	59.69	15.13	
Department Stores (NAICS 4521)			
African American	0.00	1.03	0.00
Hispanic	0.00	5.49	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.52	0.00
Nonminority female	0.00	7.58	0.00
M/WBE total	0.00	14.10	0.00
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	14.06	0.00	
Hispanic	0.82	0.93	88.97
Asian	0.05	0.93	4.98
Native American	0.00	3.67	0.00 ****
Minority	14.93	5.52	
Nonminority female	21.20	13.78	
M/WBE total	36.13	19.30	
Support Activities for Road Transportation (NAICS 4884)			
African American	0.00	11.43	0.00
Hispanic	0.00	18.81	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	30.24	0.00 ****
Nonminority female	0.03	28.33	0.10
M/WBE total	0.03	58.57	0.05 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	2.59	0.00 **
Hispanic	0.00	4.78	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.37	0.00 ****
Nonminority female	33.43	22.23	
M/WBE total	33.43	29.60	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 **
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 **
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	0.00	23.39	0.00 ****
M/WBE total	0.00	37.90	0.00 ****
Drycleaning and Laundry Services (NAICS 8123)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	10.00	0.00 ****
M/WBE total	0.00	10.00	0.00 ****
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.89	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.89	0.00 ****
Nonminority female	39.82	0.00	
M/WBE total	39.82	3.89	
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00 ****
Nonminority female	0.00	11.09	0.00 ****
M/WBE total	0.00	23.35	0.00 ****
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	78.84	0.00	
Native American	0.00	0.14	0.00
Minority	78.84	0.88	
Nonminority female	2.88	5.29	54.43
M/WBE total	81.72	6.17	
Grantmaking and Giving Services (NAICS 8132)			
African American	85.72	5.56	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	85.72	5.56	
Nonminority female	0.00	0.00	
M/WBE total	85.72	5.56	
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	0.00	12.27	0.00 ****
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.01	0.00 ****
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	0.00	22.63	0.00 ****
General Medical and Surgical Hospitals (NAICS 6221)			
African American	0.00	0.00	
Hispanic	0.00	3.08	0.00
Asian	0.00	0.00	
Native American	0.00	8.67	0.00
Minority	0.00	11.75	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	13.29	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.00	
Hispanic	0.00	0.85	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.85	0.00
Nonminority female	0.00	9.40	0.00
M/WBE total	0.00	10.26	0.00
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00 ****
Hispanic	2.34	5.58	41.94
Asian	0.00	1.19	0.00 ***
Native American	0.00	0.00	
Minority	2.34	12.35	18.95
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	2.34	35.34	6.62 ****
Cable and Other Subscription Programming (NAICS 5152)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	1.54	0.00
Native American	0.00	1.54	0.00
Minority	0.00	3.08	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	4.62	0.00
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	7.27	0.00 ***
Hispanic	0.00	21.82	0.00 ****
Asian	0.00	0.00	
Native American	0.00	1.82	0.00
Minority	0.00	30.91	0.00 ****
Nonminority female	43.42	9.09	
M/WBE total	43.42	40.00	
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)			
African American	0.00	0.00	
Hispanic	100.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	0.00	
Nonminority female	0.00	18.18	0.00 ****
M/WBE total	100.00	18.18	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Death Care Services (NAICS 8122)			
African American	0.00	0.00	
Hispanic	0.00	9.52	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.52	0.00
Nonminority female	0.00	9.52	0.00
M/WBE total	0.00	19.05	0.00 ****
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	11.11	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.11	0.00 ****
Nonminority female	0.00	11.11	0.00 ****
M/WBE total	0.00	22.22	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	20.69	5.80	
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	20.69	16.74	
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	20.69	27.89	74.19
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	6.90	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.90	0.00 ****
Nonminority female	0.00	10.34	0.00 ****
M/WBE total	0.00	17.24	0.00 ****
Other Residential Care Facilities (NAICS 6239)			
African American	0.00	5.26	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	15.79	0.00
M/WBE total	0.00	21.05	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	10.93	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.93	0.00
Nonminority female	17.08	23.49	72.73
M/WBE total	17.08	34.42	49.63
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00 *
Nonminority female	0.00	10.15	0.00 *
M/WBE total	0.00	16.12	0.00 ****
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	8.33	0.00 ****
M/WBE total	0.00	8.33	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	0.99	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.99	1.06	92.83
Nonminority female	75.17	63.45	
M/WBE total	76.15	64.52	
Other Amusement and Recreation Industries (NAICS 7139)			
African American	0.00	0.36	0.00
Hispanic	47.75	1.19	
Asian	0.00	0.36	0.00
Native American	0.00	0.00	
Minority	47.75	1.92	
Nonminority female	52.25	97.97	53.34 ****
M/WBE total	100.00	99.88	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	11.32	0.00 ****
Hispanic	0.00	5.66	0.00 ****
Asian	0.00	3.77	0.00 ****
Native American	0.00	0.00	
Minority	0.00	20.75	0.00 ****
Nonminority female	0.00	35.66	0.00 ****
M/WBE total	0.00	56.42	0.00 ****
Business Schools and Computer and Management Training (NAICS 6114)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00
Asian	0.00	4.55	0.00
Native American	0.00	4.55	0.00
Minority	0.00	18.18	0.00
Nonminority female	0.00	13.64	0.00
M/WBE total	0.00	31.82	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ****
Asian	0.00	9.49	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Converted Paper Product Manufacturing (NAICS 3222)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	25.00	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Restaurants and Other Eating Places (NAICS 7225)			
African American	0.00	0.61	0.00
Hispanic	73.89	2.77	
Asian	0.43	2.70	15.81
Native American	0.00	0.04	0.00
Minority	74.31	6.13	
Nonminority female	0.00	0.71	0.00
M/WBE total	74.31	6.84	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	6.40	2.75	
M/WBE total	6.40	11.62	55.05
Activities Related to Real Estate (NAICS 5313)			
African American	0.00	0.68	0.00
Hispanic	0.00	1.36	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	2.04	0.00
Nonminority female	38.98	33.93	
M/WBE total	38.98	35.97	
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00 ****
M/WBE total	0.00	10.71	0.00 ****
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00 ****
M/WBE total	0.00	10.71	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Nondepository Credit Intermediation (NAICS 5222)			
African American	0.00	8.07	0.00
Hispanic	0.00	0.63	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.70	0.00 ****
Nonminority female	0.00	2.52	0.00
M/WBE total	0.00	11.22	0.00 ****

Source and Notes: *See* Table 6.8.

**Table AD.6. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting (Dollars Paid)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.61	0.00 ****
Hispanic	0.00	2.28	0.00 ****
Asian	0.00	0.24	0.00
Native American	0.00	0.00	
Minority	0.00	5.12	0.00 ****
Nonminority female	0.10	8.63	1.20 ****
M/WBE total	0.10	13.76	0.75 ****
Business Support Services (NAICS 5614)			
African American	0.28	3.85	7.37
Hispanic	2.02	4.10	49.22
Asian	0.00	0.25	0.81
Native American	0.00	0.04	0.00
Minority	2.31	8.25	27.94
Nonminority female	4.29	10.18	42.11
M/WBE total	6.59	18.43	35.77
Services to Buildings and Dwellings (NAICS 5617)			
African American	8.24	0.49	
Hispanic	5.18	18.30	28.28
Asian	0.41	0.24	
Native American	0.00	0.14	0.00
Minority	13.83	19.17	72.16
Nonminority female	0.60	7.21	8.28 ***
M/WBE total	14.43	26.38	54.70
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.04	1.57	2.31 ****
Hispanic	0.14	9.55	1.43 ****
Asian	2.34	3.02	77.52
Native American	0.35	0.19	
Minority	2.86	14.34	19.98 ****
Nonminority female	41.57	11.15	
M/WBE total	44.43	25.49	
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.53	0.57	91.98
Hispanic	0.69	5.13	13.42
Asian	7.68	2.26	
Native American	0.00	0.00	
Minority	8.90	7.97	
Nonminority female	5.66	32.39	17.47 **
M/WBE total	14.55	40.36	36.06 **

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.88	0.00 ****
Hispanic	0.00	5.41	0.00 ****
Asian	11.24	1.26	
Native American	0.00	0.00	
Minority	11.24	10.55	
Nonminority female	0.00	15.43	0.00 ****
M/WBE total	11.24	25.98	43.27
Building Equipment Contractors (NAICS 2382)			
African American	13.13	1.14	
Hispanic	12.14	6.63	
Asian	0.54	1.39	39.10
Native American	0.00	0.29	0.00 ****
Minority	25.82	9.45	
Nonminority female	1.97	6.75	29.19 ***
M/WBE total	27.79	16.20	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.51	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	1.03	0.00 **
Nonminority female	0.21	0.91	22.78
M/WBE total	0.21	1.94	10.71
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	4.45	1.69	
Hispanic	10.23	8.09	
Asian	2.72	3.76	72.27
Native American	0.68	0.64	
Minority	18.07	14.18	
Nonminority female	11.33	8.40	
M/WBE total	29.40	22.58	
Other Personal Services (NAICS 8129)			
African American	0.00	2.95	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00 ****
Nonminority female	0.00	9.29	0.00 ****
M/WBE total	0.00	17.14	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Nonresidential Building Construction (NAICS 2362)			
African American	1.73	2.24	77.47
Hispanic	4.53	7.35	61.62
Asian	3.05	0.90	
Native American	0.00	0.77	0.00 ****
Minority	9.32	11.27	82.69
Nonminority female	6.71	10.33	64.94
M/WBE total	16.03	21.60	74.20
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	1.98	0.00 ****
Hispanic	1.33	8.41	15.77 ****
Asian	55.06	7.69	
Native American	0.00	4.07	0.00 ****
Minority	56.39	22.15	
Nonminority female	9.07	7.49	
M/WBE total	65.46	29.64	
Individual and Family Services (NAICS 6241)			
African American	0.52	5.85	8.82 ****
Hispanic	0.94	2.93	32.24 ***
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	1.46	9.29	15.72 ****
Nonminority female	0.00	26.79	0.00 ****
M/WBE total	1.46	36.08	4.05 ****
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	4.65	14.19	32.79
M/WBE total	4.65	34.05	13.67 *
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	11.11	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.22	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	22.22	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	6.82	5.35	
Hispanic	26.04	7.67	
Asian	0.00	7.27	0.00 ****
Native American	0.00	0.36	0.00 ****
Minority	32.87	20.65	
Nonminority female	7.10	17.44	40.71 ****
M/WBE total	39.97	38.09	
Activities Related to Credit Intermediation (NAICS 5223)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	9.29	0.00
Native American	0.00	8.01	0.00
Minority	0.00	17.31	0.00
Nonminority female	0.00	10.58	0.00
M/WBE total	0.00	27.88	0.00 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 ***
Hispanic	0.00	1.05	0.00 ***
Asian	4.29	13.53	31.71 ****
Native American	0.00	0.00	
Minority	4.29	15.77	27.21 ****
Nonminority female	1.24	5.04	24.57 **
M/WBE total	5.53	20.81	26.57 ****
Investigation and Security Services (NAICS 5616)			
African American	0.06	5.23	1.14 ***
Hispanic	11.16	11.19	99.75
Asian	0.01	0.03	48.13
Native American	0.00	0.00	
Minority	11.23	16.45	68.29
Nonminority female	1.75	14.48	12.08 **
M/WBE total	12.98	30.93	41.97
Employment Services (NAICS 5613)			
African American	3.10	4.67	66.51
Hispanic	4.35	6.03	72.16
Asian	0.00	2.01	0.00 **
Native American	0.00	1.01	0.00 **
Minority	7.46	13.72	54.36
Nonminority female	21.48	17.11	
M/WBE total	28.94	30.83	93.88

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 *
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	0.00	3.12	0.00 *
Minority	0.00	6.25	0.00 ****
Nonminority female	0.00	3.12	0.00 *
M/WBE total	0.00	9.38	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.58	0.00
M/WBE total	0.00	0.58	0.00
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	10.91	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.91	0.00 ****
Nonminority female	1.03	0.54	
M/WBE total	1.03	11.45	8.97 ****
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	1.03	9.09	11.33
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.03	9.09	11.33
Nonminority female	0.59	9.09	6.47
M/WBE total	1.62	18.18	8.90 *
Religious Organizations (NAICS 8131)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	0.06	0.00
Asian	0.00	3.68	0.00
Native American	0.00	0.00	
Minority	0.00	9.23	0.00 ****
Nonminority female	0.00	18.35	0.00 ****
M/WBE total	0.00	27.58	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)			
African American	4.00	1.30	
Hispanic	7.00	1.75	
Asian	3.69	0.90	
Native American	0.00	0.00	
Minority	14.69	3.94	
Nonminority female	0.00	10.38	0.00 ****
M/WBE total	14.69	14.33	
Vocational Rehabilitation Services (NAICS 6243)			
African American	0.00	2.13	0.00 ****
Hispanic	0.00	11.79	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	13.92	0.00 ****
Nonminority female	0.00	8.90	0.00 ****
M/WBE total	0.00	22.82	0.00 ****
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.11	0.00
Hispanic	3.29	6.34	51.95
Asian	0.00	5.23	0.00 ****
Native American	0.00	0.94	0.00 ****
Minority	3.29	12.62	26.09 ***
Nonminority female	0.00	8.97	0.00 ****
M/WBE total	3.29	21.59	15.25 ****
Residential Building Construction (NAICS 2361)			
African American	23.57	1.19	
Hispanic	10.04	16.50	60.84
Asian	0.00	1.11	0.00 ****
Native American	0.00	0.03	0.00
Minority	33.60	18.81	
Nonminority female	26.54	11.72	
M/WBE total	60.15	30.53	
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	1.44	0.00 ***
Hispanic	0.00	9.09	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.54	0.00 ****
Nonminority female	0.01	21.90	0.05 ****
M/WBE total	0.01	32.44	0.03 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Remediation and Other Waste Management Services (NAICS 5629)			
African American	10.53	0.00	
Hispanic	5.99	7.41	80.87
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	16.52	7.41	
Nonminority female	0.08	8.60	0.93 ****
M/WBE total	16.60	16.01	
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	5.75	0.00 ****
Hispanic	10.91	16.14	67.60
Asian	0.00	0.37	0.00 ***
Native American	0.00	0.18	0.00
Minority	10.91	22.43	48.63 ****
Nonminority female	5.72	8.56	66.81
M/WBE total	16.62	30.99	53.65 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.98	0.00 ****
Hispanic	12.80	16.18	79.11
Asian	0.09	0.91	10.23
Native American	0.00	1.69	0.00 ****
Minority	12.90	19.77	65.24 **
Nonminority female	16.15	14.99	
M/WBE total	29.05	34.76	83.58
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)			
African American	0.00	0.00	
Hispanic	0.00	5.09	0.00
Asian	0.00	21.92	0.00 ****
Native American	0.00	0.00	
Minority	0.00	27.01	0.00 ****
Nonminority female	0.00	15.99	0.00 ****
M/WBE total	0.00	43.00	0.00 ****
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	2.11	12.59	16.76 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	2.11	12.59	16.76 ****
Nonminority female	2.36	11.55	20.41 ****
M/WBE total	4.47	24.14	18.50 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00 ****
Nonminority female	0.00	11.41	0.00 ****
M/WBE total	0.00	22.83	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	1.64	11.88	13.78 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	1.64	17.86	9.16 ****
Nonminority female	37.81	14.68	
M/WBE total	39.45	32.54	
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00 ****
Asian	0.00	15.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.05	0.00 ****
Nonminority female	0.06	11.83	0.52
M/WBE total	0.06	33.87	0.18 *
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.21	0.73	29.16
Hispanic	0.00	6.85	0.05 ****
Asian	0.00	1.28	0.00 ****
Native American	0.00	4.46	0.00 ****
Minority	0.22	13.33	1.63 ****
Nonminority female	5.41	11.65	46.44 *
M/WBE total	5.63	24.98	22.53 ****
Building Finishing Contractors (NAICS 2383)			
African American	6.74	2.15	
Hispanic	48.38	26.23	
Asian	0.00	0.58	0.00
Native American	0.00	1.67	0.00 ****
Minority	55.12	30.64	
Nonminority female	1.45	11.07	13.13 ****
M/WBE total	56.58	41.71	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.10	0.90	10.67
Hispanic	9.03	3.80	
Asian	17.43	2.35	
Native American	0.00	0.00	
Minority	26.56	7.06	
Nonminority female	0.49	16.89	2.91 *
M/WBE total	27.05	23.95	
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Other Schools and Instruction (NAICS 6116)			
African American	0.00	5.77	0.00 ****
Hispanic	44.69	13.46	
Asian	0.00	2.96	0.00 ****
Native American	0.00	0.00	
Minority	44.69	22.20	
Nonminority female	0.00	25.05	0.00 ****
M/WBE total	44.69	47.25	94.59
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	3.72	9.80	37.95
Asian	75.93	1.96	
Native American	0.00	0.00	
Minority	79.65	11.76	
Nonminority female	6.31	9.15	68.93
M/WBE total	85.95	20.92	
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	3.41	0.00
Asian	0.00	2.73	0.00
Native American	0.00	0.00	
Minority	0.00	6.14	0.00
Nonminority female	0.00	8.12	0.00
M/WBE total	0.00	14.25	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Automotive Repair and Maintenance (NAICS 8111)			
African American	1.60	0.92	
Hispanic	7.50	9.47	79.13
Asian	0.26	0.67	38.29
Native American	11.39	0.59	
Minority	20.75	11.65	
Nonminority female	33.08	11.42	
M/WBE total	53.83	23.07	
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00 ****
Hispanic	0.00	6.25	0.00 ****
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	37.50	0.00 ****
Special Food Services (NAICS 7223)			
African American	0.00	13.25	0.00 ****
Hispanic	8.32	1.45	
Asian	0.00	0.04	0.00
Native American	0.00	0.00	
Minority	8.32	14.73	56.44
Nonminority female	0.00	5.45	0.00 ****
M/WBE total	8.32	20.19	41.19
Radio and Television Broadcasting (NAICS 5151)			
African American	4.97	0.00	
Hispanic	0.00	7.80	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	4.97	7.80	63.68
Nonminority female	0.00	3.33	0.00
M/WBE total	4.97	11.13	44.62
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	0.00	20.61	0.00 ****
M/WBE total	0.00	65.75	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	4.29	0.00 **
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	4.40	0.00 **
Nonminority female	0.06	8.88	0.63 **
M/WBE total	0.06	13.28	0.42 ***
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	0.00	7.97	0.00
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	0.00	15.95	0.00 ***
Nonminority female	20.92	23.51	88.97
M/WBE total	20.92	39.46	53.02 *
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.23	3.41	6.75 ***
Hispanic	27.07	11.90	
Asian	0.06	4.96	1.21 ****
Native American	0.00	0.01	0.00
Minority	27.36	20.28	
Nonminority female	49.55	29.44	
M/WBE total	76.91	49.72	
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	9.64	50.00	19.27 ****
M/WBE total	9.64	50.00	19.27 ****
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00 ***
Asian	1.93	4.00	48.24
Native American	0.00	0.00	
Minority	1.93	12.80	15.07
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	1.93	27.60	6.99 ***

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	0.12	1.19	10.24
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	0.12	1.98	6.18
Nonminority female	0.00	13.38	0.00 ****
M/WBE total	0.12	15.36	0.80 ****
Offices of Other Health Practitioners (NAICS 6213)			
African American	0.76	0.14	
Hispanic	0.20	0.00	
Asian	0.04	4.55	0.86
Native American	0.00	1.15	0.00
Minority	0.99	5.84	17.01
Nonminority female	0.08	53.71	0.16 ****
M/WBE total	1.08	59.55	1.81 ****
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)			
African American	0.00	3.97	0.00
Hispanic	0.00	15.37	0.00 ****
Asian	0.00	5.12	0.00
Native American	0.00	0.00	
Minority	0.00	24.46	0.00 ****
Nonminority female	0.00	12.80	0.00 ****
M/WBE total	0.00	37.26	0.00 ****
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Child Day Care Services (NAICS 6244)			
African American	0.00	1.13	0.00
Hispanic	0.00	1.91	0.00
Asian	0.00	0.69	0.00
Native American	0.00	0.13	0.00
Minority	0.00	3.86	0.00
Nonminority female	0.00	8.82	0.00 ****
M/WBE total	0.00	12.68	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.00	
Hispanic	0.00	14.26	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.26	0.00 ****
Nonminority female	0.00	2.99	0.00 ***
M/WBE total	0.00	17.25	0.00 ****
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00 ****
M/WBE total	0.00	48.18	0.00 ****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00 ****
Hispanic	0.66	11.94	5.56 ****
Asian	67.18	11.94	
Native American	0.00	0.00	
Minority	67.85	26.39	
Nonminority female	0.04	13.19	0.32 ****
M/WBE total	67.89	39.58	
Social Advocacy Organizations (NAICS 8133)			
African American	0.00	0.53	0.00
Hispanic	0.00	2.59	0.00
Asian	0.00	1.21	0.00
Native American	0.00	0.00	
Minority	0.00	4.33	0.00
Nonminority female	0.00	4.83	0.00
M/WBE total	0.00	9.16	0.00
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.60	0.00 **
Hispanic	1.58	3.46	45.58
Asian	0.00	3.50	0.00 ****
Native American	0.00	0.00	
Minority	1.58	7.56	20.87 *
Nonminority female	0.23	5.98	3.92 ****
M/WBE total	1.81	13.54	13.39 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
General Freight Trucking (NAICS 4841)			
African American	59.20	11.44	
Hispanic	25.75	21.69	
Asian	1.52	0.34	
Native American	12.72	3.34	
Minority	99.19	36.81	
Nonminority female	0.54	7.78	6.94 ****
M/WBE total	99.73	44.59	
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	100.00	7.00	
M/WBE total	100.00	7.00	
Medical and Diagnostic Laboratories (NAICS 6215)			
African American	0.00	0.00	
Hispanic	0.00	1.32	0.00
Asian	0.00	1.32	0.00
Native American	0.00	0.00	
Minority	0.00	2.63	0.00
Nonminority female	0.00	3.95	0.00
M/WBE total	0.00	6.58	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.74	0.00
Hispanic	0.00	3.76	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.00	
Minority	0.00	4.75	0.00
Nonminority female	0.00	7.77	0.00
M/WBE total	0.00	12.53	0.00 ****
Department Stores (NAICS 4521)			
African American	0.00	1.03	0.00
Hispanic	0.00	5.49	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.52	0.00
Nonminority female	0.00	7.58	0.00
M/WBE total	0.00	14.10	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00 *
Hispanic	0.00	2.34	0.00 ****
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00 ****
Nonminority female	55.22	11.53	
M/WBE total	55.22	15.13	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.06	0.00 ***
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00 ***
Nonminority female	36.46	0.00	
M/WBE total	36.46	3.06	
Support Activities for Road Transportation (NAICS 4884)			
African American	0.00	11.43	0.00
Hispanic	0.00	18.81	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	30.24	0.00 ****
Nonminority female	0.00	28.33	0.00 ****
M/WBE total	0.00	58.57	0.00 ****
Direct Selling Establishments (NAICS 4543)			
African American	0.00	2.64	0.00 **
Hispanic	0.00	4.81	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.45	0.00 ****
Nonminority female	34.21	22.48	
M/WBE total	34.21	29.93	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Drycleaning and Laundry Services (NAICS 8123)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	10.00	0.00 ****
M/WBE total	0.00	10.00	0.00 ****
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.03	0.00
Hispanic	0.00	0.90	0.00
Asian	0.00	0.03	0.00
Native American	0.00	0.00	
Minority	0.00	0.97	0.00
Nonminority female	0.00	14.91	0.00 ****
M/WBE total	0.00	15.87	0.00 ****
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	0.00	23.39	0.00 ****
M/WBE total	0.00	37.90	0.00 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.00	
Hispanic	1.07	0.93	
Asian	0.07	0.93	7.70
Native American	0.00	3.67	0.00 ****
Minority	1.14	5.52	20.74
Nonminority female	19.04	13.78	
M/WBE total	20.19	19.30	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00 ****
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00 ****
M/WBE total	100.00	13.74	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00 ****
Nonminority female	0.00	11.09	0.00 ****
M/WBE total	0.00	23.35	0.00 ****
Grantmaking and Giving Services (NAICS 8132)			
African American	84.76	5.56	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	84.76	5.56	
Nonminority female	0.00	0.00	
M/WBE total	84.76	5.56	
General Medical and Surgical Hospitals (NAICS 6221)			
African American	0.00	0.00	
Hispanic	0.00	3.08	0.00
Asian	0.00	0.00	
Native American	0.00	8.67	0.00
Minority	0.00	11.75	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	13.29	0.00
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	100.00	0.00	
Native American	0.00	0.14	0.00
Minority	100.00	0.88	
Nonminority female	0.00	5.29	0.00 *
M/WBE total	100.00	6.17	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)			
African American	0.00	0.00	
Hispanic	100.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	0.00	
Nonminority female	0.00	18.18	0.00 ****
M/WBE total	100.00	18.18	
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00 ****
Hispanic	2.57	5.58	46.11
Asian	0.00	1.19	0.00 *
Native American	0.00	0.00	
Minority	2.57	12.35	20.83
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	2.57	35.34	7.28 ****
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	7.27	0.00 ****
Hispanic	1.69	21.82	7.76 ****
Asian	0.00	0.00	
Native American	0.00	1.82	0.00 **
Minority	1.69	30.91	5.47 ****
Nonminority female	39.41	9.09	
M/WBE total	41.10	40.00	
Death Care Services (NAICS 8122)			
African American	0.00	0.00	
Hispanic	0.00	9.52	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.52	0.00
Nonminority female	0.00	9.52	0.00
M/WBE total	0.00	19.05	0.00 ****
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	11.11	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.11	0.00 ****
Nonminority female	0.00	11.11	0.00 ****
M/WBE total	0.00	22.22	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	0.00	12.27	0.00 ****
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.01	0.00 ****
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	0.00	22.63	0.00 ****
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	8.33	0.00 ***
M/WBE total	0.00	8.33	0.00 ***
Other Residential Care Facilities (NAICS 6239)			
African American	0.00	5.26	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	15.79	0.00
M/WBE total	0.00	21.05	0.00
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	6.90	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.90	0.00 ****
Nonminority female	0.00	10.34	0.00 ****
M/WBE total	0.00	17.24	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	27.44	5.80	
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	27.44	16.74	
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	27.44	27.89	98.37

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	10.93	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.93	0.00
Nonminority female	17.08	23.49	72.73
M/WBE total	17.08	34.42	49.63
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00 *
Nonminority female	0.00	10.15	0.00 *
M/WBE total	0.00	16.12	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	1.13	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	1.13	1.06	
Nonminority female	85.80	63.45	
M/WBE total	86.93	64.52	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	32.48	2.75	
M/WBE total	32.48	11.62	
Other Amusement and Recreation Industries (NAICS 7139)			
African American	0.00	0.36	0.00
Hispanic	47.72	1.19	
Asian	0.00	0.36	0.00
Native American	0.00	0.00	
Minority	47.72	1.92	
Nonminority female	52.28	97.97	53.36 ****
M/WBE total	100.00	99.88	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	11.32	0.00 ****
Hispanic	0.00	5.66	0.00 ****
Asian	0.00	3.77	0.00 ****
Native American	0.00	0.00	
Minority	0.00	20.75	0.00 ****
Nonminority female	0.00	35.66	0.00 ****
M/WBE total	0.00	56.42	0.00 ****
Cable and Other Subscription Programming (NAICS 5152)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	1.54	0.00
Native American	0.00	1.54	0.00
Minority	0.00	3.08	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	4.62	0.00
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ***
Asian	0.00	9.49	0.00 ***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Converted Paper Product Manufacturing (NAICS 3222)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	25.00	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Restaurants and Other Eating Places (NAICS 7225)			
African American	0.00	0.61	0.00
Hispanic	74.60	2.77	
Asian	0.00	2.70	0.00
Native American	0.00	0.04	0.00
Minority	74.60	6.13	
Nonminority female	0.00	0.71	0.00
M/WBE total	74.60	6.84	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Information Services (NAICS 5191)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	2.98	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	2.98	0.00
Nonminority female	0.00	17.86	0.00
M/WBE total	0.00	20.83	0.00 ****
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00
Other Motor Vehicle Dealers (NAICS 4412)			
African American	0.00	0.56	0.00
Hispanic	0.00	0.56	0.00
Asian	0.00	24.16	0.00 ****
Native American	0.00	0.00	
Minority	0.00	25.28	0.00 ****
Nonminority female	0.00	12.08	0.00 ****
M/WBE total	0.00	37.36	0.00 ****

Source and Notes: See Table 6.8.

Appendix D. Detailed Utilization, Availability & Disparity Tables

Table AD.7. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.05	0.02	
Hispanic	3.23	6.59	49.10
Asian	0.00	5.63	0.00 ****
Native American	0.00	0.93	0.00 ****
Minority	3.28	13.16	24.91 ***
Nonminority female	0.44	9.21	4.75 ****
M/WBE total	3.72	22.37	16.61 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	16.51	0.00 ****
M/WBE total	0.00	16.51	0.00 ****
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	1.78	7.79	22.80 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.78	7.79	22.80 ****
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	1.78	19.85	8.94 ****
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	1.43	0.00 ****
Hispanic	0.09	9.34	0.92 ****
Asian	0.00	2.27	0.00 ****
Native American	2.57	3.17	80.98
Minority	2.65	16.21	16.36 ****
Nonminority female	0.70	15.38	4.52 ****
M/WBE total	3.35	31.59	10.59 ****
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	7.08	12.27	57.67
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	7.08	18.01	39.28 ***
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	7.08	22.63	31.28 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.65	0.00
Hispanic	0.10	20.19	0.52 ****
Asian	0.00	0.16	0.00
Native American	0.00	0.32	0.00
Minority	0.10	21.32	0.49 ****
Nonminority female	0.00	8.54	0.00 ****
M/WBE total	0.10	29.87	0.35 ****
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	4.71	0.00 ****
Hispanic	12.70	8.32	
Asian	6.95	4.04	
Native American	1.08	2.25	48.19
Minority	20.74	19.31	
Nonminority female	23.62	11.06	
M/WBE total	44.36	30.37	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.82	0.00 ****
Hispanic	0.00	7.53	0.00 ****
Asian	0.00	0.74	0.00 ****
Native American	0.00	0.63	0.00 ****
Minority	0.00	10.72	0.00 ****
Nonminority female	0.00	11.51	0.00 ****
M/WBE total	0.00	22.23	0.00 ****
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.19	8.04	2.42 ***
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.19	8.04	2.42 ***
Nonminority female	0.00	18.59	0.00 ****
M/WBE total	0.19	26.63	0.73 ****
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Navigation, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.33	0.00
Asian	0.00	5.81	0.00 ****
Native American	0.00	0.00	
Minority	0.00	6.14	0.00 ****
Nonminority female	1.12	4.08	27.44
M/WBE total	1.12	10.22	10.94 **
Building Equipment Contractors (NAICS 2382)			
African American	0.00	0.55	0.00 ****
Hispanic	0.77	5.30	14.49 ****
Asian	0.00	2.21	0.00 ****
Native American	0.00	0.06	0.00
Minority	0.77	8.11	9.46 ****
Nonminority female	2.82	6.16	45.73
M/WBE total	3.59	14.28	25.12 ****
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	5.40	0.00 ****
Hispanic	11.75	5.94	
Asian	0.00	6.51	0.00 ****
Native American	0.00	0.03	0.00
Minority	11.75	17.88	65.72
Nonminority female	0.00	20.00	0.00 ****
M/WBE total	11.75	37.89	31.02 ****
Computer Systems Design and Related Services (NAICS 5415)			
African American	1.40	1.63	86.16
Hispanic	0.00	12.71	0.00 ****
Asian	0.80	2.94	27.09 *
Native American	0.00	0.16	0.00
Minority	2.20	17.43	12.61 ****
Nonminority female	15.85	9.09	
M/WBE total	18.05	26.53	68.04 *
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	3.68	0.00 ****
Hispanic	0.00	3.61	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.29	0.00 ****
Nonminority female	0.00	0.83	0.00 ***
M/WBE total	0.00	8.12	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	0.76	0.00
Hispanic	0.21	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.21	0.76	27.67
Nonminority female	1.09	0.00	
M/WBE total	1.30	0.76	
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Plastics Product Manufacturing (NAICS 3261)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	30.48	0.00 ****
M/WBE total	0.00	30.48	0.00 ****
Sawmills and Wood Preservation (NAICS 3211)			
African American	0.00	0.00	
Hispanic	100.00	14.29	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	14.29	
Nonminority female	0.00	0.00	
M/WBE total	100.00	14.29	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	65.29	5.65	
Hispanic	0.00	5.50	0.00 ****
Asian	0.00	1.17	0.00 ***
Native American	0.00	0.00	
Minority	65.29	12.32	
Nonminority female	1.31	22.83	5.72 ****
M/WBE total	66.59	35.15	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00 ****
M/WBE total	0.00	50.00	0.00 ****
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.73	0.00 ****
Hispanic	79.23	7.13	
Asian	0.00	3.38	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority	79.23	12.66	
Nonminority female	0.00	5.39	0.00 ****
M/WBE total	79.23	18.04	
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)			
African American	0.00	0.00	
Hispanic	96.36	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.36	0.00	
Nonminority female	0.78	0.00	
M/WBE total	97.14	0.00	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 **
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 **
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	1.81	23.39	7.74 ****
M/WBE total	1.81	37.90	4.77 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)			
African American	0.00	1.08	0.00
Hispanic	0.00	5.68	0.00 ****
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	6.99	0.00 ****
Nonminority female	0.00	45.76	0.00 ****
M/WBE total	0.00	52.75	0.00 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 **
Hispanic	2.47	1.05	
Asian	0.00	13.53	0.00 ****
Native American	0.00	0.00	
Minority	2.47	15.77	15.65 ****
Nonminority female	26.77	5.04	
M/WBE total	29.24	20.81	
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	4.03	0.00 ****
Hispanic	0.00	4.70	0.00 ****
Asian	0.00	1.34	0.00
Native American	0.00	0.00	
Minority	0.00	10.08	0.00 ****
Nonminority female	4.64	24.33	19.07
M/WBE total	4.64	34.40	13.49 **
Office Supplies, Stationery, and Gift Stores (NAICS 4532)			
African American	0.00	1.56	0.00
Hispanic	0.00	7.81	0.00
Asian	0.00	0.00	
Native American	0.00	7.97	0.00
Minority	0.00	17.34	0.00 ****
Nonminority female	1.35	10.94	12.38
M/WBE total	1.35	28.28	4.79 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	1.20	0.00 ***
Hispanic	1.36	15.51	8.74 ****
Asian	0.00	0.38	0.00
Native American	0.00	1.52	0.00 ****
Minority	1.36	18.61	7.28 ****
Nonminority female	0.00	8.48	0.00 ****
M/WBE total	1.36	27.10	5.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 ****
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	1.16	3.12	37.20
Minority	1.16	6.25	18.60
Nonminority female	0.00	3.12	0.00 ****
M/WBE total	1.16	9.38	12.40 *
Direct Selling Establishments (NAICS 4543)			
African American	0.00	5.17	0.00 ****
Hispanic	0.00	6.10	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.27	0.00 ****
Nonminority female	40.24	34.59	
M/WBE total	40.24	45.86	87.74
Basic Chemical Manufacturing (NAICS 3251)			
African American	0.00	6.81	0.00 ****
Hispanic	40.42	3.41	
Asian	0.00	3.41	0.00 ****
Native American	0.00	0.00	
Minority	40.42	13.62	
Nonminority female	0.00	10.22	0.00 ****
M/WBE total	40.42	23.84	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	5.50	0.00 ****
Hispanic	0.00	11.40	0.00 ****
Asian	0.00	0.35	0.00
Native American	0.00	1.04	0.00
Minority	0.00	18.27	0.00 ****
Nonminority female	0.00	11.62	0.00 ****
M/WBE total	0.00	29.90	0.00 ****
Business Support Services (NAICS 5614)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00
Hispanic	30.35	6.25	
Asian	0.00	6.25	0.00
Native American	0.00	6.25	0.00
Minority	30.35	25.00	
Nonminority female	0.00	12.50	0.00
M/WBE total	30.35	37.50	80.92
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	4.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.67	0.00
Nonminority female	0.00	4.67	0.00
M/WBE total	0.00	9.34	0.00 ****
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	6.01	21.37	28.13 *
M/WBE total	6.01	21.37	28.13 *
Clothing Stores (NAICS 4481)			
African American	0.00	3.69	0.00 ****
Hispanic	0.00	28.00	0.00 ****
Asian	0.00	0.04	0.00
Native American	0.00	3.60	0.00 ****
Minority	0.00	35.34	0.00 ****
Nonminority female	2.11	24.96	8.44 ****
M/WBE total	2.11	60.29	3.50 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.28	0.00
Hispanic	0.00	3.64	0.00 ****
Asian	0.00	4.04	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.96	0.00 ****
Nonminority female	0.00	6.02	0.00 ****
M/WBE total	0.00	13.98	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00 ****
Asian	0.00	20.07	0.00 ****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00 ****
Nonminority female	32.99	1.09	
M/WBE total	32.99	41.56	79.38
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	2.16	0.00 ****
Hispanic	0.00	2.24	0.00 ****
Asian	0.00	0.73	0.00
Native American	0.00	0.16	0.00
Minority	0.00	5.29	0.00 ****
Nonminority female	28.24	7.79	
M/WBE total	28.24	13.09	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	12.56	3.40	
Asian	0.00	0.24	0.00
Native American	0.00	1.99	0.00
Minority	12.56	5.63	
Nonminority female	0.00	15.37	0.00 ****
M/WBE total	12.56	21.01	59.82
Other Electrical Equipment and Component Manufacturing (NAICS 3359)			
African American	0.00	0.00	
Hispanic	0.00	10.89	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.89	0.00 ****
Nonminority female	3.33	24.22	13.76
M/WBE total	3.33	35.12	9.49 **
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	6.80	0.00 ****
Hispanic	0.00	15.72	0.00 ****
Asian	0.00	0.46	0.00 ****
Native American	0.00	0.22	0.00 **
Minority	0.00	23.21	0.00 ****
Nonminority female	29.56	7.96	
M/WBE total	29.56	31.16	94.85

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	1.09	0.00
Hispanic	0.00	1.09	0.00
Asian	0.00	12.42	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.60	0.00 ****
Nonminority female	0.00	40.06	0.00 ****
M/WBE total	0.00	54.66	0.00 ****
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	23.99	8.50	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	23.99	8.50	
Nonminority female	0.00	0.00	
M/WBE total	23.99	8.50	
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	2.34	0.00 ***
Hispanic	0.00	6.47	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.81	0.00 ****
Nonminority female	0.00	4.30	0.00 ****
M/WBE total	0.00	13.10	0.00 ****
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	9.65	0.00 ****
M/WBE total	0.00	12.71	0.00 ****
Residential Building Construction (NAICS 2361)			
African American	0.00	0.47	0.00
Hispanic	0.00	15.28	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	0.00	15.79	0.00 ****
Nonminority female	0.00	10.16	0.00 ****
M/WBE total	0.00	25.95	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	7.17	0.00 ****
Hispanic	0.00	5.23	0.00 ****
Asian	0.00	1.79	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.20	0.00 ****
Nonminority female	0.00	38.12	0.00 ****
M/WBE total	0.00	52.31	0.00 ****
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	1.47	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.47	0.00
Nonminority female	0.00	8.08	0.00 ****
M/WBE total	0.00	9.56	0.00 ****
General Freight Trucking (NAICS 4841)			
African American	0.00	11.44	0.00 ****
Hispanic	0.00	21.69	0.00 ****
Asian	0.00	0.34	0.00 *
Native American	0.00	3.34	0.00 ****
Minority	0.00	36.81	0.00 ****
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	0.00	44.59	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	12.50	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Pharmaceutical and Medicine Manufacturing (NAICS 3254)			
African American	0.00	0.00	
Hispanic	0.00	9.26	0.00 ****
Asian	0.00	9.26	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.52	0.00 ****
Nonminority female	0.00	9.26	0.00 ****
M/WBE total	0.00	27.78	0.00 ****
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00 *
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.09	0.00 *
Nonminority female	0.00	9.09	0.00 *
M/WBE total	0.00	18.18	0.00 ****
Other Miscellaneous Store Retailers (NAICS 4539)			
African American	0.00	0.44	0.00
Hispanic	0.00	0.43	0.00
Asian	0.00	0.00	
Native American	0.00	4.20	0.00 ****
Minority	0.00	5.07	0.00 ****
Nonminority female	3.20	11.57	27.69
M/WBE total	3.20	16.64	19.25
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.23	0.00 ****
Hispanic	51.39	18.97	
Asian	0.00	0.91	0.00 ****
Native American	0.00	0.64	0.00 ****
Minority	51.39	21.75	
Nonminority female	21.37	13.30	
M/WBE total	72.76	35.05	
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00 ****
Nonminority female	0.00	16.67	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	0.00	0.00	
Native American	0.00	0.14	0.00
Minority	0.00	0.88	0.00
Nonminority female	4.76	5.29	90.13
M/WBE total	4.76	6.17	77.25
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	10.45	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	10.45	0.00	
Nonminority female	0.00	15.26	0.00 ****
M/WBE total	10.45	15.26	68.48

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	8.53	0.00 ****
Hispanic	0.00	23.05	0.00 ****
Asian	0.00	1.96	0.00
Native American	0.00	0.00	
Minority	0.00	33.55	0.00 ****
Nonminority female	79.63	14.69	
M/WBE total	79.63	48.24	
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00 *
Nonminority female	44.65	1.07	
M/WBE total	44.65	1.95	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	0.00	
Hispanic	0.00	4.97	0.00 ****
Asian	0.00	0.00	
Native American	7.10	1.85	
Minority	7.10	6.82	
Nonminority female	0.00	8.67	0.00 ****
M/WBE total	7.10	15.50	45.82
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00 ****
Asian	0.00	4.00	0.00 ****
Native American	0.00	0.00	
Minority	0.00	12.80	0.00 ****
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	0.00	27.60	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	6.38	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.38	0.00 ****
Nonminority female	0.00	17.02	0.00 ****
M/WBE total	0.00	23.40	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)			
African American	0.00	16.67	0.00 ****
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	33.33	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	33.33	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ****
Asian	0.00	9.49	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	0.00	4.74	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.74	0.00 ****
Nonminority female	0.00	8.45	0.00 ****
M/WBE total	0.00	13.19	0.00 ****
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Shoe Stores (NAICS 4482)			
African American	0.00	7.66	0.00
Hispanic	0.00	0.00	
Asian	0.00	6.17	0.00
Native American	0.00	0.00	
Minority	0.00	13.83	0.00 ****
Nonminority female	0.00	9.15	0.00
M/WBE total	0.00	22.99	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	10.15	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	7.28	0.00
Native American	0.00	0.00	
Minority	0.00	17.44	0.00 ****
Nonminority female	0.00	2.87	0.00
M/WBE total	0.00	20.31	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.00	
Hispanic	0.00	7.57	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	8.09	0.00
Nonminority female	0.00	15.66	0.00 ****
M/WBE total	0.00	23.75	0.00 ****
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)			
African American	0.00	8.33	0.00
Hispanic	0.00	16.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	16.67	0.00
M/WBE total	0.00	41.67	0.00 ****
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00 ****
Nonminority female	0.00	6.12	0.00 ****
M/WBE total	0.00	9.18	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle Manufacturing (NAICS 3361)			
African American	0.00	0.00	
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	0.34	0.00 ***
Hispanic	0.00	1.28	0.00 ****
Asian	0.00	0.38	0.00 ***
Native American	8.86	0.05	
Minority	8.86	2.05	
Nonminority female	17.71	3.59	
M/WBE total	26.57	5.64	
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.00	0.90	0.00
Hispanic	0.00	3.80	0.00
Asian	0.00	2.35	0.00
Native American	0.00	0.00	
Minority	0.00	7.06	0.00 ***
Nonminority female	0.00	16.89	0.00 ****
M/WBE total	0.00	23.95	0.00 ****
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00 ****
Hispanic	0.00	6.86	0.00 ****
Asian	0.00	1.60	0.00 ****
Native American	0.00	0.00	
Minority	0.00	13.38	0.00 ****
Nonminority female	0.00	19.01	0.00 ****
M/WBE total	0.00	32.39	0.00 ****
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	28.57	0.00 ****
Native American	0.00	0.00	
Minority	0.00	28.57	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	28.57	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	86.49	1.49	
Native American	0.00	1.49	0.00
Minority	86.49	5.97	
Nonminority female	0.00	10.15	0.00 *
M/WBE total	86.49	16.12	
Legal Services (NAICS 5411)			
African American	0.00	0.00	
Hispanic	0.00	1.75	0.00 **
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.75	0.00 **
Nonminority female	0.00	8.04	0.00 ****
M/WBE total	0.00	9.80	0.00 ****
Forging and Stamping (NAICS 3321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00
Native American	0.00	0.00	
Minority	0.00	11.11	0.00
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	22.22	0.00 ****
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00 **
Hispanic	0.00	18.93	0.00 ****
Asian	0.00	0.15	0.00 **
Native American	0.00	0.15	0.00 **
Minority	0.00	19.53	0.00 ****
Nonminority female	82.78	7.22	
M/WBE total	82.78	26.75	
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	35.88	20.61	
M/WBE total	35.88	65.75	54.56

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	19.96	0.00 ****
M/WBE total	0.00	19.96	0.00 ****
Ship and Boat Building (NAICS 3366)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	16.67	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Book Stores and News Dealers (NAICS 4512)			
African American	0.00	0.00	
Hispanic	0.00	0.88	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.88	0.00
Nonminority female	0.00	4.42	0.00
M/WBE total	0.00	5.31	0.00
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.10	0.00
Hispanic	0.00	1.01	0.00
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	1.22	0.00
Nonminority female	0.00	27.22	0.00 ****
M/WBE total	0.00	28.44	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	0.00	
Hispanic	0.00	14.29	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.29	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	14.29	0.00 ****
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Other Motor Vehicle Dealers (NAICS 4412)			
African American	0.00	0.56	0.00
Hispanic	0.00	0.56	0.00
Asian	0.00	24.16	0.00 ****
Native American	0.00	0.00	
Minority	0.00	25.28	0.00 ****
Nonminority female	77.23	12.08	
M/WBE total	77.23	37.36	
Specialized Design Services (NAICS 5414)			
African American	0.00	1.50	0.00
Hispanic	0.00	3.18	0.00
Asian	0.00	1.78	0.00
Native American	0.00	0.00	
Minority	0.00	6.46	0.00 ****
Nonminority female	0.00	17.99	0.00 ****
M/WBE total	0.00	24.46	0.00 ****
Building Finishing Contractors (NAICS 2383)			
African American	0.00	0.00	
Hispanic	22.68	22.80	99.47
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	22.68	26.25	86.39
Nonminority female	0.00	9.83	0.00 ****
M/WBE total	22.68	36.08	62.86 *

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Support Activities for Mining (NAICS 2131)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	2.53	0.00
M/WBE total	0.00	2.53	0.00
Natural Gas Distribution (NAICS 2212)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00

Source and Notes: See Table 6.8.

Appendix D. Detailed Utilization, Availability & Disparity Tables

Table AD.8. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.05	0.02	
Hispanic	3.58	6.59	54.40
Asian	0.00	5.63	0.00 ****
Native American	0.00	0.93	0.00 ****
Minority	3.63	13.17	27.60 ***
Nonminority female	1.70	9.21	18.48 ***
M/WBE total	5.34	22.38	23.85 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	16.56	0.00 ****
M/WBE total	0.00	16.56	0.00 ****
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	1.81	7.79	23.23 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.81	7.79	23.23 ****
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	1.81	19.86	9.11 ****
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	1.55	0.00 ****
Hispanic	0.09	9.51	0.98 ****
Asian	0.00	2.40	0.00 ****
Native American	1.59	2.93	54.24
Minority	1.68	16.39	10.28 ****
Nonminority female	0.76	15.59	4.85 ****
M/WBE total	2.44	31.98	7.63 ****
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	7.63	12.27	62.14
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	7.63	18.01	42.33 ***
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	7.63	22.63	33.70 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.74	0.00
Hispanic	0.13	20.01	0.65 ****
Asian	0.00	0.19	0.00
Native American	0.00	0.37	0.00
Minority	0.13	21.31	0.61 ****
Nonminority female	0.00	8.75	0.00 ****
M/WBE total	0.13	30.06	0.43 ****
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	4.95	0.00 ****
Hispanic	13.36	8.88	
Asian	7.07	4.05	
Native American	1.15	2.33	49.35
Minority	21.58	20.21	
Nonminority female	24.70	11.13	
M/WBE total	46.28	31.35	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.81	0.00 ****
Hispanic	0.00	7.54	0.00 ****
Asian	0.00	0.73	0.00 ****
Native American	0.00	0.63	0.00 ****
Minority	0.00	10.70	0.00 ****
Nonminority female	0.00	11.55	0.00 ****
M/WBE total	0.00	22.25	0.00 ****
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.34	0.00
Asian	0.00	5.74	0.00 ****
Native American	0.00	0.00	
Minority	0.00	6.07	0.00 ****
Nonminority female	1.06	4.05	26.28
M/WBE total	1.06	10.12	10.51 **

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Equipment Contractors (NAICS 2382)			
African American	0.00	0.54	0.00 ****
Hispanic	0.82	5.24	15.59 ****
Asian	0.00	2.24	0.00 ****
Native American	0.00	0.05	0.00
Minority	0.82	8.07	10.13 ****
Nonminority female	2.97	6.14	48.34
M/WBE total	3.78	14.21	26.63 ****
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	5.38	0.00 ****
Hispanic	12.10	5.94	
Asian	0.00	6.49	0.00 ****
Native American	0.00	0.03	0.00
Minority	12.10	17.84	67.85
Nonminority female	0.00	20.03	0.00 ****
M/WBE total	12.10	37.87	31.96 ****
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	3.70	0.00 ****
Hispanic	0.00	3.59	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.29	0.00 ****
Nonminority female	0.00	0.82	0.00 ***
M/WBE total	0.00	8.11	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	0.91	0.00
Hispanic	0.25	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.25	0.91	27.67
Nonminority female	1.29	0.00	
M/WBE total	1.54	0.91	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.36	5.19	6.94
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.36	5.19	6.94
Nonminority female	0.00	24.66	0.00 ****
M/WBE total	0.36	29.85	1.21 ****
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	66.24	5.65	
Hispanic	0.00	5.50	0.00 ****
Asian	0.00	1.17	0.00 *
Native American	0.00	0.00	
Minority	66.24	12.32	
Nonminority female	1.37	22.82	6.01 ****
M/WBE total	67.62	35.14	
Computer Systems Design and Related Services (NAICS 5415)			
African American	2.35	1.60	
Hispanic	0.00	11.23	0.00 ****
Asian	0.00	2.98	0.00 ****
Native American	0.00	0.18	0.00
Minority	2.35	15.99	14.68 ****
Nonminority female	26.04	10.05	
M/WBE total	28.38	26.04	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00 ****
M/WBE total	0.00	50.00	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Plastics Product Manufacturing (NAICS 3261)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	30.48	0.00 ****
M/WBE total	0.00	30.48	0.00 ****
Sawmills and Wood Preservation (NAICS 3211)			
African American	0.00	0.00	
Hispanic	100.00	14.29	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	14.29	
Nonminority female	0.00	0.00	
M/WBE total	100.00	14.29	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	1.73	23.39	7.39 ****
M/WBE total	1.73	37.90	4.56 ****
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)			
African American	0.00	1.11	0.00
Hispanic	0.00	5.83	0.00 ***
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.94	0.00 ***
Nonminority female	0.00	46.39	0.00 ****
M/WBE total	0.00	53.33	0.00 ****
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)			
African American	0.00	0.00	
Hispanic	96.37	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.37	0.00	
Nonminority female	0.00	0.00	
M/WBE total	96.37	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.73	0.00 ****
Hispanic	91.71	7.13	
Asian	0.00	3.38	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority	91.71	12.66	
Nonminority female	0.00	5.39	0.00 ****
M/WBE total	91.71	18.04	
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 ***
Hispanic	2.52	1.05	
Asian	0.00	13.53	0.00 ****
Native American	0.00	0.00	
Minority	2.52	15.77	15.98 ****
Nonminority female	25.89	5.04	
M/WBE total	28.41	20.81	
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	4.37	0.00 ****
Hispanic	0.00	4.74	0.00 ****
Asian	0.00	1.46	0.00
Native American	0.00	0.00	
Minority	0.00	10.57	0.00 ****
Nonminority female	6.53	24.85	26.26
M/WBE total	6.53	35.42	18.43 **
Office Supplies, Stationery, and Gift Stores (NAICS 4532)			
African American	0.00	1.56	0.00
Hispanic	0.00	7.81	0.00
Asian	0.00	0.00	
Native American	0.00	7.97	0.00
Minority	0.00	17.34	0.00 ****
Nonminority female	1.39	10.94	12.69
M/WBE total	1.39	28.28	4.91 *
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 *
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	1.30	3.12	41.50
Minority	1.30	6.25	20.75
Nonminority female	0.00	3.12	0.00 *
M/WBE total	1.30	9.38	13.83

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.85	0.00 ****
Hispanic	1.42	13.72	10.34 ****
Asian	0.00	0.46	0.00
Native American	0.00	1.82	0.00 ****
Minority	1.42	16.84	8.42 ****
Nonminority female	0.00	9.18	0.00 ****
M/WBE total	1.42	26.02	5.45 ****
Basic Chemical Manufacturing (NAICS 3251)			
African American	0.00	6.77	0.00 *
Hispanic	36.85	3.38	
Asian	0.00	3.38	0.00 *
Native American	0.00	0.00	
Minority	36.85	13.54	
Nonminority female	0.00	10.15	0.00 ****
M/WBE total	36.85	23.69	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	11.43	0.00 ****
Asian	0.00	0.34	0.00
Native American	0.00	1.03	0.00
Minority	0.00	18.30	0.00 ****
Nonminority female	0.00	11.62	0.00 ****
M/WBE total	0.00	29.92	0.00 ****
Business Support Services (NAICS 5614)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	5.63	0.00 ****
Hispanic	0.00	6.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.96	0.00 ****
Nonminority female	45.27	36.79	
M/WBE total	45.27	48.76	92.85

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
General Freight Trucking (NAICS 4841)			
African American	0.00	11.44	0.00 ****
Hispanic	0.00	21.69	0.00 ****
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00 ****
Minority	0.00	36.81	0.00 ****
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	0.00	44.59	0.00 ****
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00 ****
Hispanic	28.69	6.25	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	28.69	25.00	
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	28.69	37.50	76.51
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	4.65	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.65	0.00
Nonminority female	0.00	4.65	0.00
M/WBE total	0.00	9.30	0.00 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.24	0.00
Hispanic	0.00	3.73	0.00 ****
Asian	0.00	4.27	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.25	0.00 ****
Nonminority female	0.00	5.34	0.00 ****
M/WBE total	0.00	13.59	0.00 ****
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00 ****
Asian	0.00	20.07	0.00 ****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00 ****
Nonminority female	32.84	1.09	
M/WBE total	32.84	41.56	79.02

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	7.45	16.76	44.45
M/WBE total	7.45	16.76	44.45
Clothing Stores (NAICS 4481)			
African American	0.00	3.63	0.00 ****
Hispanic	0.00	27.23	0.00 ****
Asian	0.00	0.05	0.00
Native American	0.00	3.50	0.00 ****
Minority	0.00	34.41	0.00 ****
Nonminority female	2.60	26.97	9.64 ****
M/WBE total	2.60	61.38	4.24 ****
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	2.37	0.00 ****
Hispanic	0.00	2.36	0.00 ****
Asian	0.00	0.77	0.00
Native American	0.00	0.15	0.00
Minority	0.00	5.64	0.00 ****
Nonminority female	31.25	8.52	
M/WBE total	31.25	14.16	
Other Electrical Equipment and Component Manufacturing (NAICS 3359)			
African American	0.00	0.00	
Hispanic	0.00	10.89	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.89	0.00 ****
Nonminority female	3.33	24.22	13.76
M/WBE total	3.33	35.12	9.49 **
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	12.86	3.44	
Asian	0.00	0.23	0.00
Native American	0.00	2.04	0.00 **
Minority	12.86	5.71	
Nonminority female	0.00	15.37	0.00 ****
M/WBE total	12.86	21.08	61.03

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	6.80	0.00 ****
Hispanic	0.00	15.72	0.00 ****
Asian	0.00	0.46	0.00 ***
Native American	0.00	0.22	0.00
Minority	0.00	23.21	0.00 ****
Nonminority female	29.06	7.96	
M/WBE total	29.06	31.16	93.24
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	3.48	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.48	0.00
Nonminority female	0.00	9.72	0.00 ****
M/WBE total	0.00	13.20	0.00 ****
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	24.28	8.57	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	24.28	8.57	
Nonminority female	0.00	0.00	
M/WBE total	24.28	8.57	
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	1.09	0.00
Hispanic	0.00	1.09	0.00
Asian	0.00	12.42	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.60	0.00 ****
Nonminority female	0.00	40.06	0.00 ****
M/WBE total	0.00	54.66	0.00 ****
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	2.34	0.00 ****
Hispanic	0.00	6.47	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.81	0.00 ****
Nonminority female	0.00	4.30	0.00 ****
M/WBE total	0.00	13.11	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	7.17	0.00 ****
Hispanic	0.00	5.23	0.00 ****
Asian	0.00	1.79	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.20	0.00 ****
Nonminority female	0.00	38.12	0.00 ****
M/WBE total	0.00	52.31	0.00 ****
Residential Building Construction (NAICS 2361)			
African American	0.00	0.47	0.00 **
Hispanic	0.00	15.28	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	0.00	15.79	0.00 ****
Nonminority female	0.00	10.16	0.00 ****
M/WBE total	0.00	25.95	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	12.50	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	6.78	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	6.78	0.00	
Nonminority female	0.00	17.05	0.00 ****
M/WBE total	6.78	17.05	39.75

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Pharmaceutical and Medicine Manufacturing (NAICS 3254)			
African American	0.00	0.00	
Hispanic	0.00	9.35	0.00 ****
Asian	0.00	9.35	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.71	0.00 ****
Nonminority female	0.00	9.35	0.00 ****
M/WBE total	0.00	28.06	0.00 ****
Other Miscellaneous Store Retailers (NAICS 4539)			
African American	0.00	0.45	0.00
Hispanic	0.00	0.44	0.00
Asian	0.00	0.00	
Native American	0.00	4.05	0.00
Minority	0.00	4.94	0.00
Nonminority female	3.29	11.29	29.11
M/WBE total	3.29	16.24	20.25
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.09	0.00
Nonminority female	0.00	9.09	0.00
M/WBE total	0.00	18.18	0.00 ****
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00 ****
Nonminority female	0.00	16.67	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.25	0.00 ****
Hispanic	54.01	18.91	
Asian	0.00	0.95	0.00 ****
Native American	0.00	0.63	0.00 ****
Minority	54.01	21.73	
Nonminority female	22.89	13.24	
M/WBE total	76.90	34.97	
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	0.00	0.00	
Native American	0.00	0.14	0.00
Minority	0.00	0.88	0.00
Nonminority female	4.87	5.29	92.10
M/WBE total	4.87	6.17	78.95
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	8.51	0.00 ****
Hispanic	0.00	22.98	0.00 ****
Asian	0.00	1.95	0.00
Native American	0.00	0.00	
Minority	0.00	33.44	0.00 ****
Nonminority female	79.34	14.67	
M/WBE total	79.34	48.11	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00
Nonminority female	40.78	1.07	
M/WBE total	40.78	1.95	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	0.00	
Hispanic	0.00	4.97	0.00 ****
Asian	0.00	0.00	
Native American	7.73	1.85	
Minority	7.73	6.82	
Nonminority female	0.00	8.67	0.00 ****
M/WBE total	7.73	15.50	49.90
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)			
African American	0.00	16.67	0.00 ****
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	33.33	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	33.33	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	6.38	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.38	0.00 ****
Nonminority female	0.00	17.02	0.00 ****
M/WBE total	0.00	23.40	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ***
Asian	0.00	9.49	0.00 ***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	0.00	5.48	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00 ****
Nonminority female	0.00	9.78	0.00 ****
M/WBE total	0.00	15.27	0.00 ****
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	10.15	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	7.28	0.00
Native American	0.00	0.00	
Minority	0.00	17.44	0.00 ****
Nonminority female	0.00	2.87	0.00
M/WBE total	0.00	20.31	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.00	
Hispanic	0.00	7.57	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	8.09	0.00
Nonminority female	0.00	15.66	0.00 ****
M/WBE total	0.00	23.75	0.00 ****
Shoe Stores (NAICS 4482)			
African American	0.00	7.66	0.00
Hispanic	0.00	0.00	
Asian	0.00	6.17	0.00
Native American	0.00	0.00	
Minority	0.00	13.83	0.00 ****
Nonminority female	0.00	9.15	0.00
M/WBE total	0.00	22.99	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)			
African American	0.00	8.33	0.00
Hispanic	0.00	16.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	16.67	0.00
M/WBE total	0.00	41.67	0.00 ****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	0.34	0.00
Hispanic	0.00	1.28	0.00 ****
Asian	0.00	0.38	0.00
Native American	8.46	0.05	
Minority	8.46	2.05	
Nonminority female	15.60	3.59	
M/WBE total	24.07	5.64	
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	6.12	0.00
M/WBE total	0.00	9.18	0.00 **
Motor Vehicle Manufacturing (NAICS 3361)			
African American	0.00	0.00	
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.00	0.90	0.00
Hispanic	0.00	3.80	0.00 ****
Asian	0.00	2.35	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.06	0.00 ****
Nonminority female	0.00	16.89	0.00 ****
M/WBE total	0.00	23.95	0.00 ****
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00 ****
Hispanic	0.00	6.86	0.00 ****
Asian	0.00	1.60	0.00 ****
Native American	0.00	0.00	
Minority	0.00	13.38	0.00 ****
Nonminority female	0.00	19.01	0.00 ****
M/WBE total	0.00	32.39	0.00 ****
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	28.57	0.00
Native American	0.00	0.00	
Minority	0.00	28.57	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	28.57	0.00
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	45.00	20.61	
M/WBE total	45.00	65.75	68.44
Legal Services (NAICS 5411)			
African American	0.00	0.00	
Hispanic	0.00	1.75	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.75	0.00 ****
Nonminority female	0.00	8.04	0.00 ****
M/WBE total	0.00	9.80	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Forging and Stamping (NAICS 3321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00
Native American	0.00	0.00	
Minority	0.00	11.11	0.00
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	22.22	0.00 ****
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	0.00	2.75	0.00
M/WBE total	0.00	11.62	0.00 ****
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00
Hispanic	0.00	18.93	0.00 ****
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	0.00	19.53	0.00 ****
Nonminority female	82.73	7.22	
M/WBE total	82.73	26.75	
Scientific Research and Development Services (NAICS 5417)			
African American	0.00	0.50	0.00
Hispanic	0.00	1.49	0.00
Asian	0.00	1.00	0.00
Native American	0.00	0.00	
Minority	0.00	2.99	0.00
Nonminority female	0.00	22.84	0.00 ****
M/WBE total	0.00	25.83	0.00 ****
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Ship and Boat Building (NAICS 3366)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	16.67	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	19.96	0.00 ****
M/WBE total	0.00	19.96	0.00 ****
Book Stores and News Dealers (NAICS 4512)			
African American	0.00	0.00	
Hispanic	0.00	0.88	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.88	0.00
Nonminority female	0.00	4.42	0.00
M/WBE total	0.00	5.31	0.00
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.10	0.00
Hispanic	0.00	1.01	0.00
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	1.22	0.00
Nonminority female	0.00	27.22	0.00 ****
M/WBE total	0.00	28.44	0.00 ****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	0.00	
Hispanic	0.00	14.29	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.29	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	14.29	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	0.00	1.50	0.00
Hispanic	0.00	3.18	0.00
Asian	0.00	1.78	0.00
Native American	0.00	0.00	
Minority	0.00	6.46	0.00 ***
Nonminority female	0.00	17.99	0.00 ****
M/WBE total	0.00	24.46	0.00 ****
Building Finishing Contractors (NAICS 2383)			
African American	0.00	0.00	
Hispanic	22.68	22.80	99.47
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	22.68	26.25	86.39
Nonminority female	0.00	9.83	0.00 ****
M/WBE total	22.68	36.08	62.86 *
Natural Gas Distribution (NAICS 2212)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00

Source and Notes: See Table 6.8.

Table AD.9. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting—Contracts with M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	9.80	8.04	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	9.80	8.04	
Nonminority female	7.05	12.04	58.52
M/WBE total	16.84	20.08	83.87
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	8.05	11.88	67.80
Asian	0.29	2.04	14.25**
Native American	0.00	0.68	0.00****
Minority	8.34	17.86	46.72***
Nonminority female	13.03	14.68	88.73
M/WBE total	21.37	32.54	65.67**
Nonresidential Building Construction (NAICS 2362)			
African American	4.18	0.63	
Hispanic	21.36	8.06	
Asian	3.52	0.25	
Native American	0.00	0.22	0.00
Minority	29.06	9.15	
Nonminority female	1.47	14.90	9.84****
M/WBE total	30.52	24.05	
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	2.03	9.80	20.73
Asian	2.13	1.96	
Native American	0.00	0.00	
Minority	4.17	11.76	35.42
Nonminority female	0.12	9.15	1.35***
M/WBE total	4.29	20.92	20.51
Building Equipment Contractors (NAICS 2382)			
African American	1.45	1.41	
Hispanic	52.02	7.57	
Asian	6.51	0.82	
Native American	0.13	0.37	35.72
Minority	60.11	10.18	
Nonminority female	7.15	7.24	98.65
M/WBE total	67.26	17.43	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.26	1.22	21.12
Hispanic	47.11	15.47	
Asian	0.00	1.36	0.00****
Native American	0.25	0.62	39.61
Minority	47.62	18.67	
Nonminority female	11.22	12.03	93.27
M/WBE total	58.84	30.70	
General Freight Trucking (NAICS 4841)			
African American	24.18	11.44	
Hispanic	59.17	21.69	
Asian	9.15	0.34	
Native American	0.00	3.34	0.00****
Minority	92.50	36.81	
Nonminority female	1.32	7.78	17.04****
M/WBE total	93.83	44.59	
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.64	0.00****
Hispanic	9.42	17.36	54.30
Asian	0.24	0.11	
Native American	0.00	0.05	0.00
Minority	9.66	20.15	47.96
Nonminority female	4.68	10.33	45.30
M/WBE total	14.34	30.48	47.06*
Remediation and Other Waste Management Services (NAICS 5629)			
African American	2.95	19.66	14.98
Hispanic	0.11	0.48	23.90
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	3.06	20.14	15.19
Nonminority female	1.78	11.11	15.98
M/WBE total	4.84	31.25	15.47*
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	31.50	11.15	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	31.50	11.15	
Nonminority female	0.00	0.00	
M/WBE total	31.50	11.15	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	5.41	1.83	
Hispanic	0.00	8.71	0.00****
Asian	0.00	2.52	0.00****
Native American	0.00	1.06	0.00***
Minority	5.41	14.11	38.30
Nonminority female	5.07	14.56	34.82
M/WBE total	10.47	28.67	36.53*
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	23.63	4.90	
M/WBE total	23.63	13.62	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	6.87	1.48	
Hispanic	10.75	7.68	
Asian	7.45	3.04	
Native American	0.07	0.70	10.14***
Minority	25.14	12.90	
Nonminority female	9.74	7.37	
M/WBE total	34.88	20.27	
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	22.50	5.80	
Asian	0.18	10.94	1.61****
Native American	0.00	0.00	
Minority	22.67	16.74	
Nonminority female	3.21	11.15	28.80
M/WBE total	25.88	27.89	92.80
Services to Buildings and Dwellings (NAICS 5617)			
African American	48.81	0.30	
Hispanic	4.49	18.93	23.74
Asian	0.02	0.15	11.79
Native American	0.00	0.15	0.00
Minority	53.32	19.53	
Nonminority female	6.72	7.22	93.00
M/WBE total	60.04	26.75	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Residential Building Construction (NAICS 2361)			
African American	5.84	0.67	
Hispanic	80.59	15.87	
Asian	0.00	0.30	0.00
Native American	1.58	0.04	
Minority	88.01	16.89	
Nonminority female	0.00	10.59	0.00****
M/WBE total	88.01	27.47	
Building Finishing Contractors (NAICS 2383)			
African American	0.30	2.42	12.28
Hispanic	2.39	33.00	7.24****
Asian	3.72	0.93	
Native American	0.00	2.28	0.00****
Minority	6.41	38.63	16.60****
Nonminority female	9.21	10.33	89.15
M/WBE total	15.62	48.96	31.90****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	45.16	7.00	
M/WBE total	45.16	7.00	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.23	0.00****
Hispanic	1.16	12.20	9.50****
Asian	35.35	10.64	
Native American	0.00	0.00	
Minority	36.51	25.07	
Nonminority female	3.87	11.76	32.90***
M/WBE total	40.38	36.83	
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.87	0.00	
Asian	0.00	7.95	0.00****
Native American	0.00	0.00	
Minority	0.87	8.87	9.83****
Nonminority female	28.73	2.75	
M/WBE total	29.60	11.62	
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00
Hispanic	99.94	6.37	
Asian	0.00	2.68	0.00
Native American	0.00	1.34	0.00
Minority	99.94	13.63	
Nonminority female	0.01	11.51	0.06
M/WBE total	99.94	25.13	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.02	3.78	0.55
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.02	13.80	0.15****
Nonminority female	6.73	36.18	18.59
M/WBE total	6.75	49.97	13.50**
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	9.93	0.74	
Asian	0.00	0.56	0.00
Native American	0.00	0.00	
Minority	9.93	1.30	
Nonminority female	0.00	18.98	0.00****
M/WBE total	9.93	20.28	48.97
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.44	0.00****
Hispanic	16.29	12.84	
Asian	0.00	0.20	0.00
Native American	0.00	0.81	0.00***
Minority	16.29	19.29	84.48
Nonminority female	6.59	8.25	79.88
M/WBE total	22.89	27.54	83.10

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	18.63	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	18.63	16.67	
Nonminority female	76.06	11.11	
M/WBE total	94.69	27.78	
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00
Asian	0.00	9.49	0.00
Native American	0.00	0.00	
Minority	0.00	18.97	0.00
Nonminority female	0.00	18.97	0.00
M/WBE total	0.00	37.94	0.00****
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.38	2.99	12.80
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.38	5.97	6.40
Nonminority female	0.00	10.15	0.00
M/WBE total	0.38	16.12	2.37
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	75.28	0.53	
Hispanic	10.16	5.86	
Asian	5.88	0.43	
Native American	0.00	0.04	0.00
Minority	91.32	6.86	
Nonminority female	8.38	9.59	87.31
M/WBE total	99.70	16.46	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	4.22	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.22	0.00
Nonminority female	39.75	0.00	
M/WBE total	39.75	4.22	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00****
Asian	98.98	2.03	
Native American	0.00	0.00	
Minority	98.98	6.49	
Nonminority female	1.02	7.25	14.01
M/WBE total	100.00	13.74	
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00
Hispanic	0.00	0.98	0.00
Asian	0.00	3.25	0.00
Native American	0.00	0.29	0.00
Minority	0.00	5.94	0.00
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****
Investigation and Security Services (NAICS 5616)			
African American	7.56	3.32	
Hispanic	0.00	6.85	0.00****
Asian	5.58	0.63	
Native American	0.00	0.00	
Minority	13.14	10.80	
Nonminority female	0.00	14.61	0.00****
M/WBE total	13.14	25.41	51.70
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00****
Nonminority female	88.77	16.67	
M/WBE total	88.77	25.00	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00****
Asian	0.00	4.25	0.00*
Native American	0.00	0.00	
Minority	0.00	19.86	0.00****
Nonminority female	30.93	14.19	
M/WBE total	30.93	34.05	90.83

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	8.25	2.94	
Hispanic	11.78	0.79	
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	20.03	5.11	
Nonminority female	67.25	22.51	
M/WBE total	87.28	27.62	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	10.00	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.00	0.00
Nonminority female	0.00	10.00	0.00
M/WBE total	0.00	20.00	0.00****
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	11.49	0.00	
Hispanic	17.49	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00
Minority	28.98	13.27	
Nonminority female	6.02	9.26	65.06
M/WBE total	35.00	22.53	
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	1.40	5.03	27.80
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.40	5.03	27.80
Nonminority female	0.00	8.98	0.00****
M/WBE total	1.40	14.01	9.99***
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	5.88	0.00**
Hispanic	62.30	7.35	
Asian	0.00	2.94	0.00**
Native American	0.00	0.00	
Minority	62.30	16.18	
Nonminority female	0.00	7.98	0.00****
M/WBE total	62.30	24.16	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00****
Asian	0.00	20.07	0.00****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00****
Nonminority female	100.00	1.09	
M/WBE total	100.00	41.56	
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	1.08	7.69	14.03
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.08	7.69	14.03
Nonminority female	0.00	0.00	
M/WBE total	1.08	7.69	14.03
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00**
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00**
Nonminority female	0.00	9.85	0.00****
M/WBE total	0.00	14.42	0.00****
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.77	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.77	0.88	87.55
Nonminority female	86.99	1.07	
M/WBE total	87.76	1.95	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00
Hispanic	15.02	7.05	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	15.02	14.10	
Nonminority female	84.98	43.59	
M/WBE total	100.00	57.69	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00****
M/WBE total	0.00	50.00	0.00****
Insurance Carriers (NAICS 5241)			
African American	0.00	0.75	0.00
Hispanic	0.00	9.70	0.00
Asian	0.00	9.70	0.00
Native American	0.00	0.00	
Minority	0.00	20.15	0.00
Nonminority female	0.00	15.17	0.00
M/WBE total	0.00	35.32	0.00****

Source and Notes: See Table 6.8.

Table AD.10. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting—Contracts with M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	11.86	8.08	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	11.86	8.08	
Nonminority female	4.37	12.04	36.29***
M/WBE total	16.23	20.12	80.65
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	9.59	11.88	80.77
Asian	0.40	2.04	19.43
Native American	0.00	0.68	0.00****
Minority	9.99	17.86	55.94**
Nonminority female	17.19	14.68	
M/WBE total	27.18	32.54	83.51
Nonresidential Building Construction (NAICS 2362)			
African American	4.46	0.73	
Hispanic	22.01	8.01	
Asian	0.98	0.30	
Native American	0.00	0.25	0.00
Minority	27.45	9.30	
Nonminority female	1.06	14.59	7.30****
M/WBE total	28.51	23.88	
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.46	9.80	4.70***
Asian	3.68	1.96	
Native American	0.00	0.00	
Minority	4.14	11.76	35.19
Nonminority female	0.09	9.15	1.02***
M/WBE total	4.23	20.92	20.24
Building Equipment Contractors (NAICS 2382)			
African American	0.87	1.41	62.12
Hispanic	53.67	7.58	
Asian	6.00	0.82	
Native American	0.17	0.37	45.49
Minority	60.72	10.18	
Nonminority female	6.61	7.25	91.13
M/WBE total	67.32	17.43	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.42	1.22	34.18
Hispanic	43.13	15.64	
Asian	0.00	1.36	0.00****
Native American	0.31	0.67	46.04
Minority	43.86	18.90	
Nonminority female	12.51	12.24	
M/WBE total	56.37	31.14	
General Freight Trucking (NAICS 4841)			
African American	23.36	11.44	
Hispanic	57.90	21.69	
Asian	11.43	0.34	
Native American	0.00	3.34	0.00****
Minority	92.69	36.81	
Nonminority female	0.88	7.78	11.35****
M/WBE total	93.57	44.59	
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.47	0.00****
Hispanic	8.40	17.42	48.20
Asian	0.29	0.09	
Native American	0.00	0.04	0.00
Minority	8.69	20.03	43.37*
Nonminority female	4.39	10.43	42.08
M/WBE total	13.07	30.46	42.93**
Remediation and Other Waste Management Services (NAICS 5629)			
African American	2.69	16.09	16.74
Hispanic	0.27	0.69	38.90
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	2.96	16.79	17.65
Nonminority female	1.64	9.89	16.61
M/WBE total	4.61	26.68	17.26
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	37.08	4.90	
M/WBE total	37.08	13.62	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	22.04	5.80	
Asian	0.15	10.94	1.33****
Native American	0.00	0.00	
Minority	22.18	16.74	
Nonminority female	3.16	11.15	28.36
M/WBE total	25.34	27.89	90.86
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	6.61	1.75	
Hispanic	0.00	8.75	0.00****
Asian	0.00	2.45	0.00***
Native American	0.00	1.07	0.00
Minority	6.61	14.02	47.17
Nonminority female	5.34	14.87	35.88
M/WBE total	11.95	28.88	41.36
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	37.56	12.95	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	37.56	12.95	
Nonminority female	0.00	0.00	
M/WBE total	37.56	12.95	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	7.47	1.64	
Hispanic	10.86	7.87	
Asian	8.57	3.07	
Native American	0.14	0.80	17.30**
Minority	27.03	13.37	
Nonminority female	7.68	7.29	
M/WBE total	34.71	20.66	
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00
Hispanic	100.00	6.37	
Asian	0.00	2.68	0.00
Native American	0.00	1.34	0.00
Minority	100.00	13.63	
Nonminority female	0.00	11.51	0.04
M/WBE total	100.00	25.13	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Finishing Contractors (NAICS 2383)			
African American	0.07	2.45	3.02**
Hispanic	1.85	32.97	5.60****
Asian	2.62	0.89	
Native American	0.00	2.29	0.00****
Minority	4.54	38.60	11.77****
Nonminority female	9.70	10.35	93.72
M/WBE total	14.24	48.95	29.10****
Residential Building Construction (NAICS 2361)			
African American	1.33	0.47	
Hispanic	85.42	15.28	
Asian	0.00	0.00	
Native American	0.83	0.04	
Minority	87.58	15.79	
Nonminority female	0.00	10.16	0.00****
M/WBE total	87.58	25.95	
Services to Buildings and Dwellings (NAICS 5617)			
African American	41.43	0.30	
Hispanic	6.20	18.93	32.75
Asian	0.04	0.15	24.60
Native American	0.00	0.15	0.00
Minority	47.67	19.53	
Nonminority female	6.41	7.22	88.71
M/WBE total	54.07	26.75	
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	38.83	7.00	
M/WBE total	38.83	7.00	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.21	0.00**
Hispanic	2.13	12.22	17.41****
Asian	29.46	10.54	
Native American	0.00	0.00	
Minority	31.59	24.97	
Nonminority female	3.87	11.65	33.25**
M/WBE total	35.46	36.62	96.84

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00***
Native American	0.00	0.00	
Minority	0.00	8.87	0.00****
Nonminority female	24.23	2.75	
M/WBE total	24.23	11.62	
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	12.42	0.96	
Asian	0.00	0.73	0.00
Native American	0.00	0.00	
Minority	12.42	1.69	
Nonminority female	0.00	18.68	0.00****
M/WBE total	12.42	20.37	60.97
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.47	0.00****
Hispanic	15.05	12.60	
Asian	0.00	0.17	0.00
Native American	0.00	0.66	0.00
Minority	15.05	18.89	79.68
Nonminority female	6.60	8.23	80.23
M/WBE total	21.66	27.13	79.84
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.03	3.79	0.71
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.03	13.80	0.20****
Nonminority female	10.10	36.16	27.95
M/WBE total	10.13	49.96	20.28
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	36.61	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	36.61	16.67	
Nonminority female	56.76	11.11	
M/WBE total	93.37	27.78	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00****
Asian	98.88	2.03	
Native American	0.00	0.00	
Minority	98.88	6.49	
Nonminority female	1.12	7.25	15.47*
M/WBE total	100.00	13.74	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	10.00	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.00	0.00
Nonminority female	0.00	10.00	0.00
M/WBE total	0.00	20.00	0.00****
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.77	2.99	25.86
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.77	5.97	12.93
Nonminority female	0.00	10.15	0.00
M/WBE total	0.77	16.12	4.79
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00
Asian	0.00	9.49	0.00
Native American	0.00	0.00	
Minority	0.00	18.97	0.00****
Nonminority female	0.00	18.97	0.00****
M/WBE total	0.00	37.94	0.00****
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00
Hispanic	0.00	0.98	0.00
Asian	0.00	3.25	0.00
Native American	0.00	0.29	0.00
Minority	0.00	5.94	0.00****
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00
Nonminority female	0.00	9.85	0.00****
M/WBE total	0.00	14.42	0.00****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	77.06	0.34	
Hispanic	8.85	1.28	
Asian	4.45	0.38	
Native American	0.00	0.05	0.00
Minority	90.36	2.05	
Nonminority female	9.46	3.59	
M/WBE total	99.82	5.64	
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	4.04	0.00**
Hispanic	60.44	8.96	
Asian	0.00	2.02	0.00
Native American	0.00	0.00	
Minority	60.44	15.03	
Nonminority female	0.00	5.49	0.00**
M/WBE total	60.44	20.51	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00****
Asian	0.00	4.25	0.00
Native American	0.00	0.00	
Minority	0.00	19.86	0.00****
Nonminority female	24.29	14.19	
M/WBE total	24.29	34.05	71.35

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	8.08	2.94	
Hispanic	12.09	0.79	
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	20.17	5.11	
Nonminority female	72.79	22.51	
M/WBE total	92.96	27.62	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	6.03	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.03	0.00
Nonminority female	59.23	0.00	
M/WBE total	59.23	6.03	
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00
Nonminority female	88.76	16.67	
M/WBE total	88.76	25.00	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	12.67	0.00	
Hispanic	17.78	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00
Minority	30.45	13.27	
Nonminority female	6.37	9.26	68.78
M/WBE total	36.82	22.53	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00
Hispanic	18.10	7.05	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	18.10	14.10	
Nonminority female	81.90	43.59	
M/WBE total	100.00	57.69	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	4.61	7.69	59.97
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	4.61	7.69	59.97
Nonminority female	0.00	0.00	
M/WBE total	4.61	7.69	59.97
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	0.55	4.34	12.79
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.55	4.34	12.79
Nonminority female	0.00	7.74	0.00
M/WBE total	0.55	12.08	4.59
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.74	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.74	0.88	83.68
Nonminority female	90.25	1.07	
M/WBE total	90.99	1.95	
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	0.96	0.00
Hispanic	100.00	5.84	
Asian	0.00	1.44	0.00
Native American	0.00	0.00	
Minority	100.00	8.24	
Nonminority female	0.00	9.13	0.00****
M/WBE total	100.00	17.38	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Insurance Carriers (NAICS 5241)			
African American	0.00	0.75	0.00
Hispanic	0.00	9.70	0.00
Asian	0.00	9.70	0.00
Native American	0.00	0.00	
Minority	0.00	20.15	0.00
Nonminority female	0.00	15.17	0.00
M/WBE total	0.00	35.32	0.00****
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	84.46	1.79	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	84.46	1.79	
Nonminority female	13.13	39.29	33.43
M/WBE total	97.59	41.07	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00****
Asian	0.00	20.07	0.00****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00****
Nonminority female	100.00	1.09	
M/WBE total	100.00	41.56	

Source and Notes: See Table 6.8.

Table AD.11. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting—Contracts with M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	4.02	1.66	
Hispanic	13.09	7.14	
Asian	10.24	3.03	
Native American	0.08	0.60	12.67*
Minority	27.42	12.43	
Nonminority female	16.86	6.87	
M/WBE total	44.28	19.31	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	0.22	0.00
Hispanic	0.00	8.24	0.00****
Asian	0.00	0.09	0.00
Native American	0.00	0.08	0.00
Minority	0.00	8.62	0.00****
Nonminority female	0.00	16.05	0.00****
M/WBE total	0.00	24.67	0.00****
Building Equipment Contractors (NAICS 2382)			
African American	0.44	1.17	37.39
Hispanic	14.88	7.54	
Asian	32.61	0.86	
Native American	0.40	0.25	
Minority	48.32	9.82	
Nonminority female	4.01	7.35	54.55
M/WBE total	52.33	17.17	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	3.70	3.03	
Hispanic	31.70	4.59	
Asian	0.24	3.41	7.03*
Native American	0.00	0.08	0.00
Minority	35.64	11.10	
Nonminority female	53.15	19.07	
M/WBE total	88.80	30.17	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	1.52	7.69	19.71****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.52	7.69	19.71****
Nonminority female	0.00	12.08	0.00****
M/WBE total	1.52	19.77	7.67****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00***
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.10	9.15	1.06***
M/WBE total	0.10	20.92	0.46****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.74	0.00****
Hispanic	10.83	17.32	62.53
Asian	0.00	0.11	0.00
Native American	0.00	0.05	0.00
Minority	10.83	20.23	53.52
Nonminority female	7.19	10.27	70.02
M/WBE total	18.02	30.50	59.08
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	62.69	1.19	
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	62.69	1.98	
Nonminority female	0.00	13.38	0.00
M/WBE total	62.69	15.36	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	2.79	0.00****
Hispanic	0.00	10.48	0.00****
Asian	0.00	3.21	0.00****
Native American	0.00	2.76	0.00****
Minority	0.00	19.24	0.00****
Nonminority female	90.92	22.24	
M/WBE total	90.92	41.48	
Employment Services (NAICS 5613)			
African American		4.43	
Hispanic		6.09	
Asian		2.13	
Native American		1.06	
Minority		13.70	
Nonminority female		16.17	
M/WBE total		29.87	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.00	
Hispanic	100.00	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00
Minority	100.00	13.27	
Nonminority female	0.00	9.26	0.00****
M/WBE total	100.00	22.53	
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.56	0.00****
Hispanic	55.31	13.42	
Asian	0.00	0.53	0.00****
Native American	0.00	0.96	0.00****
Minority	55.31	15.48	
Nonminority female	42.38	12.94	
M/WBE total	97.69	28.42	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.38	0.00***
Hispanic	0.00	29.44	0.00****
Asian	0.00	2.11	0.00****
Native American	0.00	1.35	0.00***
Minority	0.00	34.28	0.00****
Nonminority female	0.00	9.99	0.00****
M/WBE total	0.00	44.27	0.00****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.00	11.88	0.00****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00****
Minority	0.00	17.86	0.00****
Nonminority female	3.79	14.68	25.84****
M/WBE total	3.79	32.54	11.66****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	96.53	28.57	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.53	28.57	
Nonminority female	3.47	14.29	24.30
M/WBE total	100.00	42.86	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	8.44	0.00****
Asian	0.00	0.00	
Native American	0.00	8.44	0.00****
Minority	0.00	16.88	0.00****
Nonminority female	0.00	15.58	0.00****
M/WBE total	0.00	32.47	0.00****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00****
Hispanic	0.00	11.94	0.00****
Asian	100.00	11.94	
Native American	0.00	0.00	
Minority	100.00	26.39	
Nonminority female	0.00	13.19	0.00****
M/WBE total	100.00	39.58	
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	0.00	10.71	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.51	0.00****
Nonminority female	0.00	7.14	0.00****
M/WBE total	0.00	32.65	0.00****
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.33	0.00****
Hispanic	0.00	11.40	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.73	0.00****
Nonminority female	0.00	14.47	0.00****
M/WBE total	0.00	31.20	0.00****
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	12.31	1.68	
Hispanic	52.48	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	64.80	9.87	
Nonminority female	35.20	28.38	
M/WBE total	100.00	38.25	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Navigation, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	42.10	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	42.10	0.00	
Nonminority female	0.00	0.00	
M/WBE total	42.10	0.00	
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	0.00	2.34	0.00
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00
Nonminority female	89.30	11.53	
M/WBE total	89.30	15.13	
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00***
Hispanic	96.02	18.93	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	96.02	19.53	
Nonminority female	0.00	7.22	0.00****
M/WBE total	96.02	26.75	
Specialized Design Services (NAICS 5414)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.00	1.06	0.00
Nonminority female	0.00	63.45	0.00
M/WBE total	0.00	64.52	0.00
Computer Systems Design and Related Services (NAICS 5415)			
African American	3.01	1.68	
Hispanic	86.16	15.52	
Asian	10.83	2.86	
Native American	0.00	0.13	0.00
Minority	100.00	20.19	
Nonminority female	0.00	7.26	0.00
M/WBE total	100.00	27.45	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Business Support Services (NAICS 5614)			
African American	25.27	2.38	
Hispanic	0.00	8.84	0.00
Asian	2.79	0.00	
Native American	0.00	6.46	0.00
Minority	28.06	17.69	
Nonminority female	71.94	24.15	
M/WBE total	100.00	41.84	
Other Support Services (NAICS 5619)			
African American	67.42	0.27	
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	67.42	0.88	
Nonminority female	0.00	1.07	0.00
M/WBE total	67.42	1.95	
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American		0.00	
Hispanic		17.39	
Asian		0.00	
Native American		0.00	
Minority		17.39	
Nonminority female		0.00	
M/WBE total		17.39	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00****
Asian	0.00	4.25	0.00*
Native American	0.00	0.00	
Minority	0.00	19.86	0.00****
Nonminority female	100.00	14.19	
M/WBE total	100.00	34.05	

Source and Notes: See Table 6.8.

Table AD.12. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting—Contracts with M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	4.37	1.66	
Hispanic	14.12	7.21	
Asian	10.69	3.01	
Native American	0.09	0.61	15.00**
Minority	29.28	12.49	
Nonminority female	17.15	7.04	
M/WBE total	46.42	19.53	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	0.21	0.00
Hispanic	0.00	8.24	0.00****
Asian	0.00	0.09	0.00
Native American	0.00	0.07	0.00
Minority	0.00	8.61	0.00****
Nonminority female	0.00	16.07	0.00****
M/WBE total	0.00	24.68	0.00****
Building Equipment Contractors (NAICS 2382)			
African American	1.33	1.16	
Hispanic	16.72	7.53	
Asian	29.20	0.87	
Native American	0.00	0.25	0.00
Minority	47.26	9.81	
Nonminority female	4.61	7.35	62.74
M/WBE total	51.86	17.15	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	3.63	3.00	
Hispanic	40.36	5.20	
Asian	0.62	3.69	16.84
Native American	0.00	0.09	0.00
Minority	44.61	11.98	
Nonminority female	45.60	18.51	
M/WBE total	90.21	30.49	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	7.69	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00****
Nonminority female	0.00	12.08	0.00****
M/WBE total	0.00	19.77	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00*
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.11	9.15	1.15***
M/WBE total	0.11	20.92	0.50****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.82	0.00****
Hispanic	10.81	17.29	62.55
Asian	0.00	0.12	0.00
Native American	0.00	0.06	0.00
Minority	10.81	20.28	53.31
Nonminority female	8.56	10.23	83.66
M/WBE total	19.37	30.51	63.49
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.00	
Hispanic	100.00	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00
Minority	100.00	13.27	
Nonminority female	0.00	9.26	0.00****
M/WBE total	100.00	22.53	
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.57	0.00***
Hispanic	55.58	13.19	
Asian	0.00	0.54	0.00***
Native American	0.00	0.92	0.00****
Minority	55.58	15.22	
Nonminority female	42.30	12.71	
M/WBE total	97.88	27.92	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.31	0.00***
Hispanic	0.00	29.10	0.00****
Asian	0.00	2.18	0.00****
Native American	0.00	1.28	0.00***
Minority	0.00	33.87	0.00****
Nonminority female	0.00	9.98	0.00****
M/WBE total	0.00	43.85	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.00	11.88	0.00****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00****
Minority	0.00	17.86	0.00****
Nonminority female	3.61	14.68	24.58****
M/WBE total	3.61	32.54	11.09****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00***
Hispanic	0.00	11.94	0.00****
Asian	100.00	11.94	
Native American	0.00	0.00	
Minority	100.00	26.39	
Nonminority female	0.00	13.19	0.00****
M/WBE total	100.00	39.58	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	0.27	0.00
Hispanic	0.00	5.20	0.00****
Asian	0.00	0.57	0.00
Native American	0.00	2.57	0.00***
Minority	0.00	8.61	0.00****
Nonminority female	0.00	11.29	0.00****
M/WBE total	0.00	19.90	0.00****
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	8.44	0.00
Asian	0.00	0.00	
Native American	0.00	8.44	0.00
Minority	0.00	16.88	0.00
Nonminority female	0.00	15.58	0.00
M/WBE total	0.00	32.47	0.00****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	96.53	28.57	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.53	28.57	
Nonminority female	3.47	14.29	24.29
M/WBE total	100.00	42.86	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	62.69	1.19	
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	62.69	1.98	
Nonminority female	0.00	13.38	0.00
M/WBE total	62.69	15.36	
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	13.28	1.68	
Hispanic	50.06	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	63.34	9.87	
Nonminority female	36.66	28.38	
M/WBE total	100.00	38.25	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	37.81	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	37.81	0.00	
Nonminority female	0.00	0.00	
M/WBE total	37.81	0.00	
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	0.00	2.34	0.00
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00
Nonminority female	86.15	11.53	
M/WBE total	86.15	15.13	
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00
Hispanic	96.02	18.93	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	96.02	19.53	
Nonminority female	0.00	7.22	0.00****
M/WBE total	96.02	26.75	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	0.00	10.71	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.51	0.00****
Nonminority female	0.00	7.14	0.00****
M/WBE total	0.00	32.65	0.00****
Specialized Design Services (NAICS 5414)			
African American		0.00	
Hispanic		0.00	
Asian		0.00	
Native American		1.06	
Minority		1.06	
Nonminority female		63.45	
M/WBE total		64.52	
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American		0.00	
Hispanic		17.39	
Asian		0.00	
Native American		0.00	
Minority		17.39	
Nonminority female		0.00	
M/WBE total		17.39	
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.89	1.68	53.14
Hispanic	87.88	15.52	
Asian	11.23	2.86	
Native American	0.00	0.13	0.00
Minority	100.00	20.19	
Nonminority female	0.00	7.26	0.00****
M/WBE total	100.00	27.45	
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.33	0.00
Hispanic	0.00	11.40	0.00**
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.73	0.00****
Nonminority female	0.00	14.47	0.00**
M/WBE total	0.00	31.20	0.00****

Source and Notes: See Table 6.8.

**Table AD.13. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting—Contracts with M/WBE Goals (Dollars Awarded)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.55	0.00
Hispanic	0.00	2.47	0.00
Asian	0.00	0.50	0.00
Native American	0.00	0.00	
Minority	0.00	5.52	0.00
Nonminority female	100.00	8.82	
M/WBE total	100.00	14.33	
Nonresidential Building Construction (NAICS 2362)			
African American	3.06	2.30	
Hispanic	53.97	7.32	
Asian	0.00	0.93	0.00 ****
Native American	0.00	0.80	0.00 ****
Minority	57.04	11.35	
Nonminority female	33.99	10.16	
M/WBE total	91.03	21.51	
Building Equipment Contractors (NAICS 2382)			
African American	0.06	1.07	5.50 *
Hispanic	45.04	6.64	
Asian	0.00	1.39	0.00 ****
Native American	0.00	0.25	0.00 **
Minority	45.10	9.36	
Nonminority female	11.72	6.79	
M/WBE total	56.82	16.15	
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.02	0.52	3.16
Hispanic	7.35	18.19	40.41
Asian	0.00	0.25	0.00 ***
Native American	0.00	0.14	0.00
Minority	7.37	19.11	38.57
Nonminority female	0.02	7.20	0.23 ****
M/WBE total	7.39	26.31	28.07
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.55	0.00
Hispanic	0.00	9.30	0.00
Asian	0.00	2.99	0.00
Native American	0.00	0.19	0.00
Minority	0.00	14.03	0.00 ***
Nonminority female	0.00	11.32	0.00 ***
M/WBE total	0.00	25.35	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	21.86	1.69	
Hispanic	14.24	7.84	
Asian	4.69	3.61	
Native American	0.00	0.70	0.00 ****
Minority	40.79	13.84	
Nonminority female	0.08	8.32	0.95 ****
M/WBE total	40.87	22.16	
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.36	0.00
Hispanic	0.00	4.69	0.00
Asian	0.00	1.09	0.00
Native American	0.00	0.00	
Minority	0.00	9.15	0.00
Nonminority female	0.00	13.98	0.00
M/WBE total	0.00	23.13	0.00
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.00	0.57	0.00
Hispanic	6.63	5.13	
Asian	0.00	2.27	0.00
Native American	0.00	0.00	
Minority	6.63	7.97	83.24
Nonminority female	88.62	32.40	
M/WBE total	95.25	40.36	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.42	0.00
Asian	0.00	0.42	0.00
Native American	0.00	0.00	
Minority	0.00	0.85	0.00
Nonminority female	100.00	0.75	
M/WBE total	100.00	1.60	
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	2.01	0.00
Hispanic	0.00	7.87	0.00 ****
Asian	0.00	7.29	0.00 ****
Native American	0.00	3.76	0.00
Minority	0.00	20.94	0.00 ****
Nonminority female	0.00	8.10	0.00 ****
M/WBE total	0.00	29.03	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	5.27	0.00 ****
Hispanic	23.34	6.59	
Asian	0.00	6.68	0.00 ****
Native American	0.00	0.27	0.00
Minority	23.34	18.82	
Nonminority female	16.50	17.51	94.25
M/WBE total	39.84	36.33	
Other Personal Services (NAICS 8129)			
African American	0.00	2.96	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00
Nonminority female	0.00	9.41	0.00
M/WBE total	0.00	17.26	0.00
Employment Services (NAICS 5613)			
African American	0.00	4.74	0.00
Hispanic	0.00	6.02	0.00
Asian	0.00	1.98	0.00
Native American	0.00	0.99	0.00
Minority	0.00	13.73	0.00
Nonminority female	100.00	17.39	
M/WBE total	100.00	31.11	
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.24	0.00 ****
Hispanic	15.98	11.20	
Asian	4.40	0.03	
Native American	0.00	0.00	
Minority	20.38	16.46	
Nonminority female	0.00	14.48	0.00 ****
M/WBE total	20.38	30.94	65.88
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00 *
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	0.00	14.19	0.00 ****
M/WBE total	0.00	34.05	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.75	0.00
M/WBE total	0.00	0.75	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.12	0.00
Hispanic	0.00	6.31	0.00 ****
Asian	0.00	5.19	0.00 ****
Native American	0.00	0.94	0.00
Minority	0.00	12.57	0.00 ****
Nonminority female	0.00	8.94	0.00 ****
M/WBE total	0.00	21.51	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	4.36	11.88	36.69 ***
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	4.36	17.86	24.40 ****
Nonminority female	1.12	14.68	7.64 ****
M/WBE total	5.48	32.54	16.84 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.83	0.00 ****
Hispanic	35.05	13.20	
Asian	0.00	0.78	0.00 ****
Native American	0.00	1.28	0.00 ****
Minority	35.05	16.09	
Nonminority female	17.96	12.78	
M/WBE total	53.02	28.87	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	5.96	10.94	54.48
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	5.96	10.94	54.48
Nonminority female	0.06	11.73	0.55 ****
M/WBE total	6.03	22.67	26.58 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	5.42	0.00 ****
Hispanic	14.41	16.27	88.62
Asian	0.00	0.34	0.00 **
Native American	0.00	0.16	0.00
Minority	14.41	22.19	64.95
Nonminority female	0.86	8.74	9.80 ****
M/WBE total	15.27	30.94	49.36 *
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	7.40	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.40	0.00 ****
Nonminority female	0.17	8.60	1.98 ****
M/WBE total	0.17	16.00	1.06 ****
Residential Building Construction (NAICS 2361)			
African American	34.24	1.23	
Hispanic	51.53	16.19	
Asian	0.00	1.20	0.00
Native American	0.00	0.03	0.00
Minority	85.76	18.64	
Nonminority female	0.00	11.83	0.00 ****
M/WBE total	85.76	30.47	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	0.66	0.00
Hispanic	0.00	6.77	0.00 ****
Asian	0.00	1.13	0.00 ***
Native American	0.00	5.15	0.00 ****
Minority	0.00	13.72	0.00 ****
Nonminority female	30.09	12.40	
M/WBE total	30.09	26.11	
Automotive Repair and Maintenance (NAICS 8111)			
African American	12.49	1.02	
Hispanic	0.00	10.84	0.00 ****
Asian	6.59	0.75	
Native American	0.00	0.67	0.00
Minority	19.08	13.27	
Nonminority female	53.57	12.53	
M/WBE total	72.66	25.80	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Finishing Contractors (NAICS 2383)			
African American	0.00	2.21	0.00 ****
Hispanic	2.07	25.66	8.07 ****
Asian	0.00	0.44	0.00
Native American	0.00	1.68	0.00 ***
Minority	2.07	29.99	6.90 ****
Nonminority female	3.08	11.20	27.52
M/WBE total	5.15	41.18	12.51 ****
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00
Asian	0.00	15.25	0.00
Native American	0.00	0.00	
Minority	0.00	22.05	0.00
Nonminority female	0.00	11.83	0.00
M/WBE total	0.00	33.87	0.00 ****
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00 ****
Asian	66.94	1.96	
Native American	0.00	0.00	
Minority	66.94	11.76	
Nonminority female	0.00	9.15	0.00 ****
M/WBE total	66.94	20.92	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00 ****
Hispanic	0.00	11.94	0.00 ****
Asian	9.00	11.94	75.35
Native American	0.00	0.00	
Minority	9.00	26.39	34.10 ****
Nonminority female	0.00	13.19	0.00 ****
M/WBE total	9.00	39.58	22.74 ****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	76.77	3.45	
Hispanic	10.89	11.71	92.94
Asian	12.34	4.96	
Native American	0.00	0.01	0.00
Minority	100.00	20.14	
Nonminority female	0.00	29.66	0.00 ****
M/WBE total	100.00	49.80	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00
Asian	0.00	4.00	0.00
Native American	0.00	0.00	
Minority	0.00	12.80	0.00
Nonminority female	0.00	14.80	0.00
M/WBE total	0.00	27.60	0.00 ****
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
General Freight Trucking (NAICS 4841)			
African American	96.86	11.44	
Hispanic	2.45	21.69	11.30 ****
Asian	0.53	0.34	
Native American	0.00	3.34	0.00 ****
Minority	99.84	36.81	
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	99.84	44.59	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00
M/WBE total	0.00	48.18	0.00 ****
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00 ****
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00 ****
M/WBE total	100.00	13.74	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.62	0.00
Hispanic	0.00	3.45	0.00 ****
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.52	0.00 ****
Nonminority female	0.00	6.02	0.00 ****
M/WBE total	0.00	13.54	0.00 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.00	
Hispanic	0.00	0.93	0.00 ***
Asian	0.00	0.93	0.00 ***
Native American	0.00	3.67	0.00 ****
Minority	0.00	5.52	0.00 ****
Nonminority female	31.29	13.78	
M/WBE total	31.29	19.30	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.89	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.89	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	3.89	0.00
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00
Hispanic	3.30	5.58	59.22
Asian	0.00	1.19	0.00
Native American	0.00	0.00	
Minority	3.30	12.35	26.75
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	3.30	35.34	9.35 ****
Specialized Freight Trucking (NAICS 4842)			
African American		7.27	
Hispanic		21.82	
Asian		0.00	
Native American		1.82	
Minority		30.91	
Nonminority female		9.09	
M/WBE total		40.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	80.77	2.75	
M/WBE total	80.77	11.62	
Activities Related to Real Estate (NAICS 5313)			
African American	0.00	0.68	0.00
Hispanic	0.00	1.36	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	2.04	0.00
Nonminority female	56.12	33.93	
M/WBE total	56.12	35.97	
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Source and Notes: See Table 6.8.

**Table AD.14. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting—Contracts with M/WBE Goals (Dollars Paid)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.61	0.00
Hispanic	0.00	2.28	0.00
Asian	0.00	0.24	0.00
Native American	0.00	0.00	
Minority	0.00	5.12	0.00
Nonminority female	100.00	8.63	
M/WBE total	100.00	13.76	
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.02	0.49	3.19
Hispanic	8.61	18.30	47.04
Asian	0.00	0.24	0.00
Native American	0.00	0.14	0.00
Minority	8.62	19.17	44.98
Nonminority female	0.05	7.21	0.74 ****
M/WBE total	8.68	26.38	32.89
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.57	0.00
Hispanic	0.00	9.55	0.00 ****
Asian	0.00	3.02	0.00
Native American	0.00	0.19	0.00
Minority	0.00	14.34	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	25.49	0.00 ****
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.00	0.57	0.00
Hispanic	7.27	5.13	
Asian	0.00	2.26	0.00
Native American	0.00	0.00	
Minority	7.27	7.97	91.21
Nonminority female	81.00	32.39	
M/WBE total	88.27	40.36	
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.88	0.00
Hispanic	0.00	5.41	0.00
Asian	0.00	1.26	0.00
Native American	0.00	0.00	
Minority	0.00	10.55	0.00
Nonminority female	0.00	15.43	0.00
M/WBE total	0.00	25.98	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Equipment Contractors (NAICS 2382)			
African American	0.10	1.14	8.42
Hispanic	11.89	6.63	
Asian	0.00	1.39	0.00 ****
Native American	0.00	0.29	0.00
Minority	11.98	9.45	
Nonminority female	21.61	6.75	
M/WBE total	33.59	16.20	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.51	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	1.03	0.00
Nonminority female	100.00	0.91	
M/WBE total	100.00	1.94	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	19.69	1.69	
Hispanic	12.75	8.09	
Asian	3.29	3.76	87.38
Native American	0.00	0.64	0.00 ****
Minority	35.72	14.18	
Nonminority female	0.56	8.40	6.64 ****
M/WBE total	36.28	22.58	
Other Personal Services (NAICS 8129)			
African American	0.00	2.95	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00
Nonminority female	0.00	9.29	0.00
M/WBE total	0.00	17.14	0.00
Nonresidential Building Construction (NAICS 2362)			
African American	3.57	2.24	
Hispanic	47.25	7.35	
Asian	0.00	0.90	0.00 ***
Native American	0.00	0.77	0.00
Minority	50.83	11.27	
Nonminority female	39.66	10.33	
M/WBE total	90.49	21.60	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	1.98	0.00
Hispanic	0.00	8.41	0.00
Asian	0.00	7.69	0.00
Native American	0.00	4.07	0.00
Minority	0.00	22.15	0.00 ****
Nonminority female	0.00	7.49	0.00
M/WBE total	0.00	29.64	0.00 ****
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	0.00	14.19	0.00 ****
M/WBE total	0.00	34.05	0.00 ****
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.47	5.35	8.72 ***
Hispanic	74.53	7.67	
Asian	0.00	7.27	0.00 ****
Native American	0.00	0.36	0.00
Minority	75.00	20.65	
Nonminority female	21.54	17.44	
M/WBE total	96.53	38.09	
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.23	0.00
Hispanic	21.94	11.19	
Asian	4.99	0.03	
Native American	0.00	0.00	
Minority	26.92	16.45	
Nonminority female	0.00	14.48	0.00 **
M/WBE total	26.92	30.93	87.06
Employment Services (NAICS 5613)			
African American	0.00	4.67	0.00
Hispanic	0.00	6.03	0.00
Asian	0.00	2.01	0.00
Native American	0.00	1.01	0.00
Minority	0.00	13.72	0.00
Nonminority female	100.00	17.11	
M/WBE total	100.00	30.83	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.58	0.00
M/WBE total	0.00	0.58	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.11	0.00
Hispanic	0.00	6.34	0.00 ****
Asian	0.00	5.23	0.00 ****
Native American	0.00	0.94	0.00
Minority	0.00	12.62	0.00 ****
Nonminority female	0.00	8.97	0.00 ****
M/WBE total	0.00	21.59	0.00 ****
Residential Building Construction (NAICS 2361)			
African American	31.34	1.19	
Hispanic	54.69	16.50	
Asian	0.00	1.11	0.00
Native American	0.00	0.03	0.00
Minority	86.03	18.81	
Nonminority female	0.00	11.72	0.00 ****
M/WBE total	86.03	30.53	
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	7.41	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.41	0.00 ****
Nonminority female	0.23	8.60	2.72 ****
M/WBE total	0.23	16.01	1.46 ****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	5.75	0.00 ****
Hispanic	21.13	16.14	
Asian	0.00	0.37	0.00
Native American	0.00	0.18	0.00
Minority	21.13	22.43	94.19
Nonminority female	6.55	8.56	76.49
M/WBE total	27.67	30.99	89.30

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.98	0.00 ****
Hispanic	49.14	16.18	
Asian	0.00	0.91	0.00 ****
Native American	0.00	1.69	0.00 ****
Minority	49.14	19.77	
Nonminority female	13.07	14.99	87.19
M/WBE total	62.20	34.76	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	19.63	12.59	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	19.63	12.59	
Nonminority female	0.00	11.55	0.00 ****
M/WBE total	19.63	24.14	81.31
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	4.64	11.88	39.04 ***
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	4.64	17.86	25.96 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	4.64	32.54	14.25 ****
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00
Asian	0.00	15.25	0.00
Native American	0.00	0.00	
Minority	0.00	22.05	0.00
Nonminority female	0.00	11.83	0.00
M/WBE total	0.00	33.87	0.00 ****
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	0.73	0.00
Hispanic	0.00	6.85	0.00 ****
Asian	0.00	1.28	0.00
Native American	0.00	4.46	0.00 ****
Minority	0.00	13.33	0.00 ****
Nonminority female	100.00	11.65	
M/WBE total	100.00	24.98	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Finishing Contractors (NAICS 2383)			
African American	0.00	2.15	0.00 ****
Hispanic	2.43	26.23	9.28 ****
Asian	0.00	0.58	0.00
Native American	0.00	1.67	0.00 ***
Minority	2.43	30.64	7.95 ****
Nonminority female	3.52	11.07	31.77
M/WBE total	5.95	41.71	14.27 ****
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00 ****
Asian	100.00	1.96	
Native American	0.00	0.00	
Minority	100.00	11.76	
Nonminority female	0.00	9.15	0.00 ****
M/WBE total	100.00	20.92	
Automotive Repair and Maintenance (NAICS 8111)			
African American	13.79	0.92	
Hispanic	0.00	9.47	0.00 ****
Asian	0.44	0.67	65.10
Native American	0.00	0.59	0.00
Minority	14.22	11.65	
Nonminority female	57.79	11.42	
M/WBE total	72.01	23.07	
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	62.23	3.41	
Hispanic	21.15	11.90	
Asian	16.62	4.96	
Native American	0.00	0.01	0.00
Minority	100.00	20.28	
Nonminority female	0.00	29.44	0.00 ****
M/WBE total	100.00	49.72	
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00
Asian	0.00	4.00	0.00
Native American	0.00	0.00	
Minority	0.00	12.80	0.00
Nonminority female	0.00	14.80	0.00
M/WBE total	0.00	27.60	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00
M/WBE total	0.00	48.18	0.00 ****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00 ***
Hispanic	0.00	11.94	0.00 ****
Asian	0.00	11.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	26.39	0.00 ****
Nonminority female	0.00	13.19	0.00 ****
M/WBE total	0.00	39.58	0.00 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.60	0.00
Hispanic	0.00	3.46	0.00 ****
Asian	0.00	3.50	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.56	0.00 ****
Nonminority female	0.00	5.98	0.00 ****
M/WBE total	0.00	13.54	0.00 ****
General Freight Trucking (NAICS 4841)			
African American	99.02	11.44	
Hispanic	0.68	21.69	3.15 ****
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00 ****
Minority	99.71	36.81	
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	99.71	44.59	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.06	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	3.06	0.00
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.00	
Hispanic	0.00	0.93	0.00
Asian	0.00	0.93	0.00
Native American	0.00	3.67	0.00 **
Minority	0.00	5.52	0.00 ****
Nonminority female	31.29	13.78	
M/WBE total	31.29	19.30	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00 ****
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00 ****
M/WBE total	100.00	13.74	
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00
Hispanic	3.30	5.58	59.22
Asian	0.00	1.19	0.00
Native American	0.00	0.00	
Minority	3.30	12.35	26.75
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	3.30	35.34	9.35 ****
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	7.27	0.00 ****
Hispanic	100.00	21.82	
Asian	0.00	0.00	
Native American	0.00	1.82	0.00
Minority	100.00	30.91	
Nonminority female	0.00	9.09	0.00 ****
M/WBE total	100.00	40.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ***
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	97.12	2.75	
M/WBE total	97.12	11.62	

Source and Notes: See Table 6.8.

Table AD.15. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting—Contracts with M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	100.00	7.79	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	7.79	
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	100.00	19.85	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.82	0.00 ****
Hispanic	0.00	7.53	0.00 ****
Asian	0.00	0.74	0.00 ***
Native American	0.00	0.63	0.00 ***
Minority	0.00	10.72	0.00 ****
Nonminority female	0.00	11.51	0.00 ****
M/WBE total	0.00	22.23	0.00 ****
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.63	0.00
Hispanic	0.00	12.71	0.00 ***
Asian	0.00	2.94	0.00
Native American	0.00	0.16	0.00
Minority	0.00	17.43	0.00 ****
Nonminority female	0.00	9.09	0.00
M/WBE total	0.00	26.53	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.23	0.00 ****
Hispanic	100.00	18.97	
Asian	0.00	0.91	0.00 ****
Native American	0.00	0.64	0.00 ****
Minority	100.00	21.75	
Nonminority female	0.00	13.30	0.00 ****
M/WBE total	100.00	35.05	

Source and Notes: See Table 6.8.

Table AD.16. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting—Contracts with M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	100.00	7.79	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	7.79	
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	100.00	19.86	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.81	0.00 ****
Hispanic	0.00	7.54	0.00 ****
Asian	0.00	0.73	0.00
Native American	0.00	0.63	0.00
Minority	0.00	10.70	0.00 ****
Nonminority female	0.00	11.55	0.00 ****
M/WBE total	0.00	22.25	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 ****
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.60	0.00
Hispanic	0.00	11.23	0.00 ****
Asian	0.00	2.98	0.00
Native American	0.00	0.18	0.00
Minority	0.00	15.99	0.00 ****
Nonminority female	0.00	10.05	0.00 ****
M/WBE total	0.00	26.04	0.00 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.25	0.00 ****
Hispanic	100.00	18.91	
Asian	0.00	0.95	0.00 ****
Native American	0.00	0.63	0.00 ***
Minority	100.00	21.73	
Nonminority female	0.00	13.24	0.00 ****
M/WBE total	100.00	34.97	

Source and Notes: See Table 6.8.

Table AD.17. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting—Contracts without M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	4.96	8.04	61.66
Asian	0.00	0.00	
Native American	0.13	0.00	
Minority	5.08	8.04	63.23
Nonminority female	4.59	12.04	38.12
M/WBE total	9.67	20.08	48.17
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.16	3.26	4.89**
Hispanic	1.97	11.88	16.58**
Asian	0.08	2.04	4.07
Native American	0.00	0.68	0.00*
Minority	2.21	17.86	12.39****
Nonminority female	9.60	14.68	65.37
M/WBE total	11.81	32.54	36.29***
Nonresidential Building Construction (NAICS 2362)			
African American	0.79	0.63	
Hispanic	1.60	8.06	19.87
Asian	1.67	0.25	
Native American	0.00	0.22	0.00
Minority	4.06	9.15	44.31
Nonminority female	0.09	14.90	0.59****
M/WBE total	4.14	24.05	17.23***
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	1.53	1.96	77.94
Native American	0.00	0.00	
Minority	1.53	11.76	12.99
Nonminority female	0.52	9.15	5.63
M/WBE total	2.04	20.92	9.77
Building Equipment Contractors (NAICS 2382)			
African American	1.43	1.41	
Hispanic	5.73	7.57	75.65
Asian	5.92	0.82	
Native American	0.00	0.37	0.00**
Minority	13.08	10.18	
Nonminority female	1.24	7.24	17.16***
M/WBE total	14.32	17.43	82.19

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.17	1.22	14.20
Hispanic	52.89	15.47	
Asian	0.00	1.36	0.00****
Native American	0.00	0.62	0.00**
Minority	53.06	18.67	
Nonminority female	11.59	12.03	96.35
M/WBE total	64.65	30.70	
General Freight Trucking (NAICS 4841)			
African American	6.05	11.44	52.90
Hispanic	8.80	21.69	40.59
Asian	0.19	0.34	54.33
Native American	0.00	3.34	0.00***
Minority	15.04	36.81	40.86
Nonminority female	0.40	7.78	5.11***
M/WBE total	15.44	44.59	34.62
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.64	0.00****
Hispanic	5.80	17.36	33.44***
Asian	0.00	0.11	0.00
Native American	0.00	0.05	0.00
Minority	5.80	20.15	28.81****
Nonminority female	7.48	10.33	72.42
M/WBE total	13.29	30.48	43.59****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	2.65	19.66	13.48****
Hispanic	0.00	0.48	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	2.65	20.14	13.16****
Nonminority female	14.32	11.11	
M/WBE total	16.97	31.25	54.32
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	35.66	11.15	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	35.66	11.15	
Nonminority female	0.01	0.00	
M/WBE total	35.66	11.15	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	10.11	1.83	
Hispanic	0.00	8.71	0.00****
Asian	0.00	2.52	0.00****
Native American	0.00	1.06	0.00****
Minority	10.11	14.11	71.65
Nonminority female	12.42	14.56	85.35
M/WBE total	22.53	28.67	78.60
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	5.19	4.90	
M/WBE total	5.19	13.62	38.08
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.48	0.00****
Hispanic	16.42	7.68	
Asian	1.15	3.04	37.84***
Native American	0.10	0.70	13.55***
Minority	17.67	12.90	
Nonminority female	12.42	7.37	
M/WBE total	30.08	20.27	
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00****
Nonminority female	0.00	11.41	0.00****
M/WBE total	0.00	22.83	0.00****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	10.81	5.80	
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	10.81	16.74	64.59
Nonminority female	4.58	11.15	41.08
M/WBE total	15.39	27.89	55.19

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Services to Buildings and Dwellings (NAICS 5617)			
African American	61.57	0.30	
Hispanic	5.71	18.93	30.16
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	67.28	19.53	
Nonminority female	0.98	7.22	13.57
M/WBE total	68.26	26.75	
Residential Building Construction (NAICS 2361)			
African American	5.96	0.67	
Hispanic	57.19	15.87	
Asian	0.00	0.30	0.00
Native American	0.00	0.04	0.00
Minority	63.16	16.89	
Nonminority female	7.72	10.59	72.88
M/WBE total	70.87	27.47	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	2.42	0.00****
Hispanic	7.51	33.00	22.74****
Asian	5.14	0.93	
Native American	0.00	2.28	0.00****
Minority	12.64	38.63	32.73****
Nonminority female	39.01	10.33	
M/WBE total	51.65	48.96	
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	4.08	7.00	58.27
M/WBE total	4.08	7.00	58.27
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00****
Nonminority female	0.00	11.09	0.00****
M/WBE total	0.00	23.35	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.23	0.00***
Hispanic	0.00	12.20	0.00****
Asian	67.06	10.64	
Native American	0.00	0.00	
Minority	67.06	25.07	
Nonminority female	0.00	11.76	0.00****
M/WBE total	67.06	36.83	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00****
Nonminority female	0.44	2.75	15.81
M/WBE total	0.44	11.62	3.75
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00***
Hispanic	88.97	6.37	
Asian	0.00	2.68	0.00
Native American	0.00	1.34	0.00
Minority	88.97	13.63	
Nonminority female	10.73	11.51	93.30
M/WBE total	99.71	25.13	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.00	3.78	0.00
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.00	13.80	0.00****
Nonminority female	0.00	36.18	0.00****
M/WBE total	0.00	49.97	0.00****
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	44.16	0.74	
Asian	0.00	0.56	0.00
Native American	0.00	0.00	
Minority	44.16	1.30	
Nonminority female	0.00	18.98	0.00****
M/WBE total	44.16	20.28	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.44	0.00****
Hispanic	11.58	12.84	90.19
Asian	0.00	0.20	0.00
Native American	0.00	0.81	0.00
Minority	11.58	19.29	60.03
Nonminority female	2.99	8.25	36.20
M/WBE total	14.57	27.54	52.89
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.18	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	0.18	16.67	1.09****
Nonminority female	0.00	11.11	0.00****
M/WBE total	0.18	27.78	0.65****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00****
Asian	0.00	9.49	0.00****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00****
Nonminority female	0.00	18.97	0.00****
M/WBE total	0.00	37.94	0.00****
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00
Nonminority female	0.00	10.15	0.00****
M/WBE total	0.00	16.12	0.00****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	13.74	0.53	
Hispanic	8.84	5.86	
Asian	52.46	0.43	
Native American	0.00	0.04	0.00
Minority	75.04	6.86	
Nonminority female	1.82	9.59	19.01**
M/WBE total	76.87	16.46	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	4.22	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.22	0.00****
Nonminority female	0.00	0.00	
M/WBE total	0.00	4.22	0.00****
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00****
M/WBE total	100.00	13.74	
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	12.50	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	12.50	0.00****
Nonminority female	0.00	0.00	
M/WBE total	0.00	12.50	0.00****
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00****
Hispanic	0.00	0.98	0.00****
Asian	0.00	3.25	0.00****
Native American	0.00	0.29	0.00**
Minority	0.00	5.94	0.00****
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****
Investigation and Security Services (NAICS 5616)			
African American	100.00	3.32	
Hispanic	0.00	6.85	0.00***
Asian	0.00	0.63	0.00
Native American	0.00	0.00	
Minority	100.00	10.80	
Nonminority female	0.00	14.61	0.00****
M/WBE total	100.00	25.41	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00****
Nonminority female	100.00	16.67	
M/WBE total	100.00	25.00	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	39.52	15.04	
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	39.52	19.86	
Nonminority female	0.00	14.19	0.00****
M/WBE total	39.52	34.05	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	2.94	0.00****
Hispanic	1.31	0.79	
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	1.31	5.11	25.71**
Nonminority female	26.44	22.51	
M/WBE total	27.75	27.62	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	100.00	10.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	10.00	
Nonminority female	0.00	10.00	0.00****
M/WBE total	100.00	20.00	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.00	
Hispanic	0.00	6.64	0.00****
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	0.00	13.27	0.00****
Nonminority female	84.79	9.26	
M/WBE total	84.79	22.53	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	40.01	5.03	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	40.01	5.03	
Nonminority female	34.99	8.98	
M/WBE total	74.99	14.01	
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	5.88	0.00
Hispanic	98.32	7.35	
Asian	0.00	2.94	0.00
Native American	0.00	0.00	
Minority	98.32	16.18	
Nonminority female	0.00	7.98	0.00
M/WBE total	98.32	24.16	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00****
Asian	0.00	20.07	0.00****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00****
Nonminority female	100.00	1.09	
M/WBE total	100.00	41.56	
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00**
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00**
Nonminority female	1.25	9.85	12.72
M/WBE total	1.25	14.42	8.68

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00
Nonminority female	32.97	1.07	
M/WBE total	32.97	1.95	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	100.00	43.59	
M/WBE total	100.00	57.69	

Source and Notes: See Table 6.8.

Table AD.18. Industry Group Utilization, Availability, and Disparity Results for City of Austin Construction Contracting—Contracts without M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	8.72	8.08	
Asian	0.00	0.00	
Native American	0.15	0.00	
Minority	8.87	8.08	
Nonminority female	6.60	12.04	54.80
M/WBE total	15.47	20.12	76.88
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.04	3.26	1.24***
Hispanic	2.43	11.88	20.48**
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00
Minority	2.47	17.86	13.85****
Nonminority female	4.97	14.68	33.83*
M/WBE total	7.44	32.54	22.86****
Nonresidential Building Construction (NAICS 2362)			
African American	0.83	0.73	
Hispanic	2.44	8.01	30.41
Asian	0.00	0.30	0.00
Native American	0.00	0.25	0.00
Minority	3.27	9.30	35.18
Nonminority female	0.10	14.59	0.66****
M/WBE total	3.37	23.88	14.09****
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	1.58	1.96	80.47
Native American	0.00	0.00	
Minority	1.58	11.76	13.41
Nonminority female	0.53	9.15	5.84
M/WBE total	2.11	20.92	10.10
Building Equipment Contractors (NAICS 2382)			
African American	1.87	1.41	
Hispanic	7.54	7.58	99.44
Asian	6.09	0.82	
Native American	0.00	0.37	0.00**
Minority	15.50	10.18	
Nonminority female	0.65	7.25	8.90****
M/WBE total	16.14	17.43	92.61

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.22	0.00****
Hispanic	57.98	15.64	
Asian	0.00	1.36	0.00****
Native American	0.00	0.67	0.00
Minority	57.98	18.90	
Nonminority female	10.89	12.24	88.95
M/WBE total	68.87	31.14	
General Freight Trucking (NAICS 4841)			
African American	6.68	11.44	58.42
Hispanic	5.47	21.69	25.21
Asian	0.55	0.34	
Native American	0.00	3.34	0.00****
Minority	12.70	36.81	34.50
Nonminority female	0.44	7.78	5.70
M/WBE total	13.14	44.59	29.48
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.47	0.00****
Hispanic	5.54	17.42	31.81****
Asian	0.00	0.09	0.00
Native American	0.00	0.04	0.00
Minority	5.54	20.03	27.67****
Nonminority female	9.48	10.43	90.89
M/WBE total	15.02	30.46	49.31****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.39	16.09	2.39****
Hispanic	0.00	0.69	0.00**
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.39	16.79	2.30****
Nonminority female	24.20	9.89	
M/WBE total	24.58	26.68	92.15
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00****
Nonminority female	0.00	11.41	0.00****
M/WBE total	0.00	22.83	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	4.59	4.90	93.59
M/WBE total	4.59	13.62	33.69
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	17.18	5.80	
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	17.18	16.74	
Nonminority female	7.33	11.15	65.75
M/WBE total	24.51	27.89	87.88
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.49	1.75	28.20
Hispanic	0.00	8.75	0.00****
Asian	0.00	2.45	0.00****
Native American	0.00	1.07	0.00****
Minority	0.49	14.02	3.52****
Nonminority female	20.43	14.87	
M/WBE total	20.93	28.88	72.45
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	48.45	12.95	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	48.45	12.95	
Nonminority female	0.01	0.00	
M/WBE total	48.46	12.95	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.64	0.00****
Hispanic	12.31	7.87	
Asian	1.08	3.07	35.17****
Native American	0.63	0.80	78.58
Minority	14.02	13.37	
Nonminority female	18.95	7.29	
M/WBE total	32.97	20.66	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	0.00	3.23	0.00****
Hispanic	98.88	6.37	
Asian	0.00	2.68	0.00****
Native American	0.00	1.34	0.00****
Minority	98.88	13.63	
Nonminority female	1.11	11.51	9.61***
M/WBE total	99.98	25.13	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	2.45	0.00****
Hispanic	8.01	32.97	24.29****
Asian	6.09	0.89	
Native American	0.00	2.29	0.00****
Minority	14.10	38.60	36.52****
Nonminority female	42.02	10.35	
M/WBE total	56.12	48.95	
Residential Building Construction (NAICS 2361)			
African American	7.16	0.47	
Hispanic	54.44	15.28	
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	61.59	15.79	
Nonminority female	9.26	10.16	91.20
M/WBE total	70.86	25.95	
Services to Buildings and Dwellings (NAICS 5617)			
African American	59.19	0.30	
Hispanic	7.05	18.93	37.26
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	66.24	19.53	
Nonminority female	3.47	7.22	48.07
M/WBE total	69.72	26.75	
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00****
Nonminority female	0.00	11.09	0.00****
M/WBE total	0.00	23.35	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.28	7.00	4.03
M/WBE total	0.28	7.00	4.03
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.21	0.00
Hispanic	0.00	12.22	0.00****
Asian	70.34	10.54	
Native American	0.00	0.00	
Minority	70.34	24.97	
Nonminority female	0.00	11.65	0.00****
M/WBE total	70.34	36.62	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00****
Nonminority female	0.11	2.75	4.13
M/WBE total	0.11	11.62	0.98
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	100.00	0.96	
Asian	0.00	0.73	0.00
Native American	0.00	0.00	
Minority	100.00	1.69	
Nonminority female	0.00	18.68	0.00****
M/WBE total	100.00	20.37	
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	5.47	0.00****
Hispanic	6.62	12.60	52.55
Asian	0.00	0.17	0.00
Native American	0.00	0.66	0.00**
Minority	6.62	18.89	35.04
Nonminority female	13.72	8.23	
M/WBE total	20.34	27.13	74.97

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	9.36	0.00****
Hispanic	0.00	3.79	0.00*
Asian	0.00	0.33	0.00
Native American	0.00	0.33	0.00
Minority	0.00	13.80	0.00****
Nonminority female	0.00	36.16	0.00****
M/WBE total	0.00	49.96	0.00****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.12	0.00	
Asian	0.00	16.67	0.00****
Native American	0.00	0.00	
Minority	0.12	16.67	0.73****
Nonminority female	0.00	11.11	0.00****
M/WBE total	0.12	27.78	0.44****
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00
M/WBE total	100.00	13.74	
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	100.00	10.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	10.00	
Nonminority female	0.00	10.00	0.00****
M/WBE total	100.00	20.00	
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00
Nonminority female	0.00	10.15	0.00****
M/WBE total	0.00	16.12	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00***
Asian	0.00	9.49	0.00***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00****
Nonminority female	0.00	18.97	0.00****
M/WBE total	0.00	37.94	0.00****
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.00	1.42	0.00****
Hispanic	0.00	0.98	0.00****
Asian	0.00	3.25	0.00****
Native American	0.00	0.29	0.00***
Minority	0.00	5.94	0.00****
Nonminority female	0.00	16.72	0.00****
M/WBE total	0.00	22.66	0.00****
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	12.50	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	12.50	0.00****
Nonminority female	0.00	0.00	
M/WBE total	0.00	12.50	0.00****
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	0.00	
Hispanic	0.00	4.09	0.00****
Asian	0.00	0.49	0.00
Native American	0.00	0.00	
Minority	0.00	4.58	0.00****
Nonminority female	0.98	9.85	9.93
M/WBE total	0.98	14.42	6.78
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	49.30	0.34	
Hispanic	17.81	1.28	
Asian	3.68	0.38	
Native American	0.00	0.05	0.00
Minority	70.79	2.05	
Nonminority female	2.30	3.59	64.07
M/WBE total	73.09	5.64	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	4.04	0.00
Hispanic	98.63	8.96	
Asian	0.00	2.02	0.00
Native American	0.00	0.00	
Minority	98.63	15.03	
Nonminority female	0.00	5.49	0.00
M/WBE total	98.63	20.51	
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	100.00	15.04	
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	100.00	19.86	
Nonminority female	0.00	14.19	0.00****
M/WBE total	100.00	34.05	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	2.94	0.00****
Hispanic	0.73	0.79	92.48
Asian	0.00	1.38	0.00****
Native American	0.00	0.00	
Minority	0.73	5.11	14.28****
Nonminority female	44.91	22.51	
M/WBE total	45.64	27.62	
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00****
Nonminority female	100.00	16.67	
M/WBE total	100.00	25.00	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.00	
Hispanic	8.66	6.64	
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	8.66	13.27	65.25
Nonminority female	71.47	9.26	
M/WBE total	80.13	22.53	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	100.00	43.59	
M/WBE total	100.00	57.69	
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	47.49	4.34	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	47.49	4.34	
Nonminority female	14.55	7.74	
M/WBE total	62.04	12.08	
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00
Nonminority female	27.89	1.07	
M/WBE total	27.89	1.95	
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	0.96	0.00
Hispanic	0.20	5.84	3.36***
Asian	0.00	1.44	0.00****
Native American	0.00	0.00	
Minority	0.20	8.24	2.38****
Nonminority female	29.81	9.13	
M/WBE total	30.01	17.38	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	0.00	1.79	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.79	0.00****
Nonminority female	0.00	39.29	0.00****
M/WBE total	0.00	41.07	0.00****

Source and Notes: *See* Table 6.8.

Table AD.19. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting—Contracts without M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	3.63	1.66	
Hispanic	11.61	7.14	
Asian	8.99	3.03	
Native American	0.00	0.60	0.00****
Minority	24.23	12.43	
Nonminority female	13.47	6.87	
M/WBE total	37.70	19.31	
Nonresidential Building Construction (NAICS 2362)			
African American	1.29	0.22	
Hispanic	0.57	8.24	6.90***
Asian	0.00	0.09	3.03
Native American	0.00	0.08	0.00
Minority	1.86	8.62	21.55
Nonminority female	0.04	16.05	0.26****
M/WBE total	1.90	24.67	7.70****
Building Equipment Contractors (NAICS 2382)			
African American	1.58	1.17	
Hispanic	83.61	7.54	
Asian	0.11	0.86	12.32
Native American	0.00	0.25	0.00**
Minority	85.29	9.82	
Nonminority female	1.21	7.35	16.45****
M/WBE total	86.50	17.17	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	4.40	3.03	
Hispanic	2.23	4.59	48.72
Asian	1.18	3.41	34.48
Native American	0.00	0.08	0.00
Minority	7.81	11.10	70.35
Nonminority female	43.81	19.07	
M/WBE total	51.62	30.17	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	7.69	0.00****
Asian	10.82	0.00	
Native American	0.00	0.00	
Minority	10.82	7.69	
Nonminority female	0.04	12.08	0.31****
M/WBE total	10.86	19.77	54.94

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00**
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.00	9.15	0.00****
M/WBE total	0.00	20.92	0.00****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.74	0.00****
Hispanic	3.38	17.32	19.54****
Asian	0.00	0.11	0.00
Native American	0.00	0.05	0.00
Minority	3.38	20.23	16.72****
Nonminority female	1.30	10.27	12.66****
M/WBE total	4.68	30.50	15.35****
Legal Services (NAICS 5411)			
African American	1.02	0.71	
Hispanic	0.00	1.19	0.00**
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	1.02	1.98	51.63
Nonminority female	19.62	13.38	
M/WBE total	20.64	15.36	
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	5.77	4.90	
M/WBE total	5.77	13.62	42.38
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	7.65	2.79	
Hispanic	0.00	10.48	0.00****
Asian	0.00	3.21	0.00****
Native American	0.00	2.76	0.00****
Minority	7.65	19.24	39.75****
Nonminority female	14.10	22.24	63.39*
M/WBE total	21.75	41.48	52.42****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	0.00	4.43	0.00***
Hispanic	1.39	6.09	22.82
Asian	0.00	2.13	0.00
Native American	0.00	1.06	0.00
Minority	1.39	13.70	10.14****
Nonminority female	33.46	16.17	
M/WBE total	34.85	29.87	
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	6.67	0.00	
Hispanic	1.51	6.64	22.82*
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	8.19	13.27	61.69
Nonminority female	0.00	9.26	0.00****
M/WBE total	8.19	22.53	36.34***
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	4.08	0.56	
Hispanic	0.00	13.42	0.00****
Asian	0.00	0.53	0.00**
Native American	0.00	0.96	0.00****
Minority	4.08	15.48	26.37****
Nonminority female	4.99	12.94	38.56**
M/WBE total	9.07	28.42	31.92****
Residential Building Construction (NAICS 2361)			
African American	10.36	0.47	
Hispanic	89.05	15.28	
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	99.41	15.79	
Nonminority female	0.00	10.16	0.00****
M/WBE total	99.41	25.95	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.38	0.00****
Hispanic	0.00	29.44	0.00****
Asian	0.00	2.11	0.00****
Native American	0.00	1.35	0.00****
Minority	0.00	34.28	0.00****
Nonminority female	41.21	9.99	
M/WBE total	41.21	44.27	93.09

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.55	5.80	9.54
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	0.55	16.74	3.30**
Nonminority female	0.00	11.15	0.00****
M/WBE total	0.55	27.89	1.98****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.87	11.88	7.30****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00*
Minority	0.87	17.86	4.85****
Nonminority female	34.35	14.68	
M/WBE total	35.22	32.54	
Remediation and Other Waste Management Services (NAICS 5629)			
African American	95.84	28.57	
Hispanic	1.67	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	97.51	28.57	
Nonminority female	1.30	14.29	9.07***
M/WBE total	98.81	42.86	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00***
Hispanic	0.00	11.94	0.00****
Asian	59.37	11.94	
Native American	0.00	0.00	
Minority	59.37	26.39	
Nonminority female	34.68	13.19	
M/WBE total	94.05	39.58	
General Freight Trucking (NAICS 4841)			
African American	78.97	11.44	
Hispanic	21.03	21.69	96.96
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00***
Minority	100.00	36.81	
Nonminority female	0.00	7.78	0.00****
M/WBE total	100.00	44.59	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.00	
Hispanic	92.84	1.08	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	92.84	1.08	
Nonminority female	7.16	1.08	
M/WBE total	100.00	2.15	
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	83.52	10.71	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	83.52	25.51	
Nonminority female	0.00	7.14	0.00****
M/WBE total	83.52	32.65	
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	0.93	0.00
Hispanic	0.00	4.10	0.00
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	8.46	0.00****
M/WBE total	0.00	13.72	0.00****
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	1.10	7.97	13.83
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	1.10	15.95	6.91***
Nonminority female	0.00	23.51	0.00****
M/WBE total	1.10	39.46	2.79****
Investigation and Security Services (NAICS 5616)			
African American	9.20	5.33	
Hispanic	85.26	11.40	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	94.46	16.73	
Nonminority female	1.73	14.47	11.96*
M/WBE total	96.19	31.20	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	46.23	1.68	
Hispanic	24.88	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	71.10	9.87	
Nonminority female	10.63	28.38	37.47
M/WBE total	81.74	38.25	
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00****
Hispanic	0.00	6.86	0.00****
Asian	0.00	1.60	0.00
Native American	0.00	0.00	
Minority	0.00	13.38	0.00****
Nonminority female	0.00	19.01	0.00****
M/WBE total	0.00	32.39	0.00****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	0.00	2.34	0.00***
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00****
Nonminority female	88.62	11.53	
M/WBE total	88.62	15.13	
Individual and Family Services (NAICS 6241)			
African American	0.00	5.48	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00****
Nonminority female	0.00	21.90	0.00****
M/WBE total	0.00	27.38	0.00****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	91.43	43.59	
M/WBE total	91.43	57.69	
Services to Buildings and Dwellings (NAICS 5617)			
African American	81.51	0.30	
Hispanic	7.69	18.93	40.64
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	89.20	19.53	
Nonminority female	6.38	7.22	88.40
M/WBE total	95.58	26.75	
Office Administrative Services (NAICS 5611)			
African American	0.00	0.36	0.00
Hispanic	100.00	4.05	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	100.00	4.70	
Nonminority female	0.00	8.68	0.00
M/WBE total	100.00	13.38	
Specialized Design Services (NAICS 5414)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.00	1.06	0.00
Nonminority female	83.43	63.45	
M/WBE total	83.43	64.52	
Computer Systems Design and Related Services (NAICS 5415)			
African American	1.08	1.68	64.32
Hispanic	81.79	15.52	
Asian	0.00	2.86	0.00****
Native American	0.00	0.13	0.00
Minority	82.87	20.19	
Nonminority female	0.24	7.26	3.33****
M/WBE total	83.11	27.45	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Business Support Services (NAICS 5614)			
African American	15.54	2.38	
Hispanic	72.16	8.84	
Asian	1.13	0.00	
Native American	0.00	6.46	0.00****
Minority	88.83	17.69	
Nonminority female	10.45	24.15	43.26
M/WBE total	99.27	41.84	
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00
Other Support Services (NAICS 5619)			
African American	28.49	0.27	
Hispanic	17.95	0.36	
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	46.45	0.88	
Nonminority female	25.75	1.07	
M/WBE total	72.19	1.95	
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	11.11	0.00
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	34.87	17.39	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	34.87	17.39	
Nonminority female	0.00	0.00	
M/WBE total	34.87	17.39	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00****
Asian	0.00	4.25	0.00****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00****
Nonminority female	0.00	14.19	0.00****
M/WBE total	0.00	34.05	0.00****

Source and Notes: *See* Table 6.8.

Table AD.20. Industry Group Utilization, Availability, and Disparity Results for City of Austin Professional Services Contracting—Contracts without M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	4.32	1.66	
Hispanic	13.15	7.21	
Asian	8.46	3.01	
Native American	0.00	0.61	0.00****
Minority	25.93	12.49	
Nonminority female	14.08	7.04	
M/WBE total	40.01	19.53	
Nonresidential Building Construction (NAICS 2362)			
African American	1.23	0.21	
Hispanic	0.72	8.24	8.73***
Asian	0.00	0.09	0.00
Native American	0.00	0.07	0.00
Minority	1.95	8.61	22.66
Nonminority female	0.03	16.07	0.18****
M/WBE total	1.98	24.68	8.02****
Building Equipment Contractors (NAICS 2382)			
African American	1.92	1.16	
Hispanic	83.32	7.53	
Asian	0.00	0.87	0.00****
Native American	0.00	0.25	0.00**
Minority	85.24	9.81	
Nonminority female	1.09	7.35	14.81****
M/WBE total	86.33	17.15	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	4.89	3.00	
Hispanic	2.86	5.20	55.08
Asian	1.18	3.69	32.06
Native American	0.00	0.09	0.00
Minority	8.93	11.98	74.59
Nonminority female	47.33	18.51	
M/WBE total	56.27	30.49	
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	7.69	0.00****
Asian	9.14	0.00	
Native American	0.00	0.00	
Minority	9.14	7.69	
Nonminority female	0.04	12.08	0.32****
M/WBE total	9.18	19.77	46.43

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	0.00	9.80	0.00****
Asian	0.00	1.96	0.00
Native American	0.00	0.00	
Minority	0.00	11.76	0.00****
Nonminority female	0.00	9.15	0.00****
M/WBE total	0.00	20.92	0.00****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	2.82	0.00****
Hispanic	2.74	17.29	15.85****
Asian	0.00	0.12	0.00
Native American	0.00	0.06	0.00
Minority	2.74	20.28	13.51****
Nonminority female	1.74	10.23	17.05****
M/WBE total	4.48	30.51	14.70****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.00	
Hispanic	0.00	3.92	0.00****
Asian	0.00	4.79	0.00****
Native American	0.00	0.00	
Minority	0.00	8.71	0.00****
Nonminority female	4.03	4.90	82.19
M/WBE total	4.03	13.62	29.59
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	7.50	0.00	
Hispanic	0.26	6.64	3.91****
Asian	0.00	5.71	0.00****
Native American	0.00	0.93	0.00****
Minority	7.76	13.27	58.45
Nonminority female	0.00	9.26	0.00****
M/WBE total	7.76	22.53	34.43****
Residential Building Construction (NAICS 2361)			
African American	7.46	0.47	
Hispanic	82.40	15.28	
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	89.86	15.79	
Nonminority female	8.01	10.16	78.89
M/WBE total	97.87	25.95	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	4.99	0.57	
Hispanic	0.00	13.19	0.00****
Asian	0.00	0.54	0.00
Native American	0.00	0.92	0.00***
Minority	4.99	15.22	32.79***
Nonminority female	5.25	12.71	41.29*
M/WBE total	10.24	27.92	36.66****
Employment Services (NAICS 5613)			
African American	0.00	5.07	0.00****
Hispanic	1.86	5.94	31.39
Asian	0.00	1.83	0.00****
Native American	0.00	0.91	0.00
Minority	1.86	13.75	13.57***
Nonminority female	51.71	18.67	
M/WBE total	53.57	32.42	
Building Finishing Contractors (NAICS 2383)			
African American	0.00	1.31	0.00****
Hispanic	0.00	29.10	0.00****
Asian	0.00	2.18	0.00****
Native American	0.00	1.28	0.00****
Minority	0.00	33.87	0.00****
Nonminority female	30.32	9.98	
M/WBE total	30.32	43.85	69.14
General Freight Trucking (NAICS 4841)			
African American	67.35	11.44	
Hispanic	32.65	21.69	
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00****
Minority	100.00	36.81	
Nonminority female	0.00	7.78	0.00****
M/WBE total	100.00	44.59	
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00****
Hispanic	0.35	11.88	2.94****
Asian	0.00	2.04	0.00****
Native American	0.00	0.68	0.00
Minority	0.35	17.86	1.96****
Nonminority female	34.93	14.68	
M/WBE total	35.28	32.54	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00
Hispanic	0.00	11.94	0.00****
Asian	57.10	11.94	
Native American	0.00	0.00	
Minority	57.10	26.39	
Nonminority female	37.33	13.19	
M/WBE total	94.43	39.58	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	0.27	0.00
Hispanic	0.00	5.20	0.00****
Asian	0.00	0.57	0.00
Native American	0.00	2.57	0.00****
Minority	0.00	8.61	0.00****
Nonminority female	36.07	11.29	
M/WBE total	36.07	19.90	
Remediation and Other Waste Management Services (NAICS 5629)			
African American	95.35	28.57	
Hispanic	1.03	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.38	28.57	
Nonminority female	2.51	14.29	17.56***
M/WBE total	98.89	42.86	
Legal Services (NAICS 5411)			
African American	4.21	0.71	
Hispanic	0.00	1.19	0.00****
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	4.21	1.98	
Nonminority female	16.20	13.38	
M/WBE total	20.41	15.36	
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.00	
Hispanic	93.47	1.08	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	93.47	1.08	
Nonminority female	6.53	1.08	
M/WBE total	100.00	2.15	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	0.93	0.00
Hispanic	0.00	4.10	0.00
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	8.46	0.00****
M/WBE total	0.00	13.72	0.00****
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	48.77	1.68	
Hispanic	20.34	8.19	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	69.11	9.87	
Nonminority female	11.58	28.38	40.79
M/WBE total	80.69	38.25	
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00****
Asian	0.00	10.94	0.00****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00****
Nonminority female	0.00	11.15	0.00****
M/WBE total	0.00	27.89	0.00****
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	7.05	0.00****
Hispanic	0.00	7.05	0.00****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.10	0.00****
Nonminority female	92.69	43.59	
M/WBE total	92.69	57.69	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	5.48	0.00****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00****
Nonminority female	0.00	21.90	0.00****
M/WBE total	0.00	27.38	0.00****
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00**
Hispanic	0.00	2.34	0.00****
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00****
Nonminority female	77.15	11.53	
M/WBE total	77.15	15.13	
Services to Buildings and Dwellings (NAICS 5617)			
African American	84.09	0.30	
Hispanic	7.60	18.93	40.17
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	91.69	19.53	
Nonminority female	4.91	7.22	68.02
M/WBE total	96.60	26.75	
Office Administrative Services (NAICS 5611)			
African American	0.00	0.36	0.00
Hispanic	100.00	4.05	
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	100.00	4.70	
Nonminority female	0.00	8.68	0.00****
M/WBE total	100.00	13.38	
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	2.04	7.97	25.56
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	2.04	15.95	12.78**
Nonminority female	0.00	23.51	0.00****
M/WBE total	2.04	39.46	5.17****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	14.80	0.00****
Hispanic	53.55	10.71	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	53.55	25.51	
Nonminority female	0.00	7.14	0.00****
M/WBE total	53.55	32.65	
Specialized Design Services (NAICS 5414)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.00	1.06	0.00
Nonminority female	88.04	63.45	
M/WBE total	88.04	64.52	
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	30.34	17.39	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	30.34	17.39	
Nonminority female	0.00	0.00	
M/WBE total	30.34	17.39	
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.62	1.68	36.91
Hispanic	79.55	15.52	
Asian	0.00	2.86	0.00****
Native American	0.00	0.13	0.00
Minority	80.17	20.19	
Nonminority female	1.33	7.26	18.37****
M/WBE total	81.50	27.45	
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	11.11	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Investigation and Security Services (NAICS 5616)			
African American	76.97	5.33	
Hispanic	7.10	11.40	62.29
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	84.07	16.73	
Nonminority female	3.26	14.47	22.51
M/WBE total	87.33	31.20	

Source and Notes: *See* Table 6.8.

**Table AD.21. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting—Contracts without M/WBE Goals (Dollars Awarded)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.55	0.00 **
Hispanic	0.00	2.47	0.00 **
Asian	0.00	0.50	0.00
Native American	0.00	0.00	
Minority	0.00	5.52	0.00 **
Nonminority female	0.08	8.82	0.86 ****
M/WBE total	0.08	14.33	0.53 ****
Nonresidential Building Construction (NAICS 2362)			
African American	0.75	2.30	32.62
Hispanic	0.93	7.32	12.75
Asian	0.67	0.93	71.78
Native American	0.00	0.80	0.00 *
Minority	2.35	11.35	20.71
Nonminority female	1.07	10.16	10.48 **
M/WBE total	3.42	21.51	15.88 ***
Business Support Services (NAICS 5614)			
African American	0.33	3.57	9.14
Hispanic	1.99	3.82	52.20
Asian	0.00	0.24	0.77
Native American	0.00	0.04	0.00
Minority	2.32	7.67	30.26
Nonminority female	7.13	9.99	71.35
M/WBE total	9.45	17.66	53.52
Building Equipment Contractors (NAICS 2382)			
African American	8.63	1.07	
Hispanic	9.39	6.64	
Asian	0.37	1.39	26.33
Native American	0.00	0.25	0.00 **
Minority	18.38	9.36	
Nonminority female	0.99	6.79	14.56 ****
M/WBE total	19.37	16.15	
Services to Buildings and Dwellings (NAICS 5617)			
African American	15.25	0.52	
Hispanic	2.56	18.19	14.08 ***
Asian	0.69	0.25	
Native American	0.00	0.14	0.00
Minority	18.50	19.11	96.81
Nonminority female	1.04	7.20	14.49
M/WBE total	19.54	26.31	74.27

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.15	1.55	9.46 *
Hispanic	0.38	9.30	4.07 ****
Asian	4.30	2.99	
Native American	0.40	0.19	
Minority	5.23	14.03	37.23 ***
Nonminority female	39.18	11.32	
M/WBE total	44.41	25.35	
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	2.48	1.69	
Hispanic	6.53	7.84	83.26
Asian	1.89	3.61	52.21 *
Native American	0.60	0.70	86.36
Minority	11.50	13.84	83.09
Nonminority female	9.61	8.32	
M/WBE total	21.11	22.16	95.25
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.36	0.00 ****
Hispanic	0.00	4.69	0.00 ****
Asian	9.88	1.09	
Native American	0.00	0.00	
Minority	9.88	9.15	
Nonminority female	0.00	13.98	0.00 ****
M/WBE total	9.88	23.13	42.74
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.51	0.57	89.97
Hispanic	0.64	5.13	12.41
Asian	8.27	2.27	
Native American	0.00	0.00	
Minority	9.42	7.97	
Nonminority female	6.43	32.40	19.84 *
M/WBE total	15.85	40.36	39.27 *
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.42	0.00
Asian	0.00	0.42	0.00
Native American	0.00	0.00	
Minority	0.00	0.85	0.00 **
Nonminority female	0.17	0.75	22.45
M/WBE total	0.17	1.60	10.56

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	2.01	0.00 ****
Hispanic	1.26	7.87	15.99 ****
Asian	53.58	7.29	
Native American	0.00	3.76	0.00 ****
Minority	54.84	20.94	
Nonminority female	8.13	8.10	
M/WBE total	62.97	29.03	
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	11.43	5.27	
Hispanic	13.35	6.59	
Asian	0.00	6.68	0.00 ****
Native American	0.00	0.27	0.00 *
Minority	24.78	18.82	
Nonminority female	5.55	17.51	31.69 ****
M/WBE total	30.33	36.33	83.49
Other Personal Services (NAICS 8129)			
African American	0.00	2.96	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00 ****
Nonminority female	0.00	9.41	0.00 ****
M/WBE total	0.00	17.26	0.00 ****
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	9.53	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.53	0.00 ****
Nonminority female	0.76	0.36	
M/WBE total	0.76	9.89	7.69 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 **
Hispanic	0.00	1.05	0.00 **
Asian	3.44	13.53	25.40 ****
Native American	0.00	0.00	
Minority	3.44	15.77	21.79 ****
Nonminority female	0.99	5.04	19.71 ***
M/WBE total	4.43	20.81	21.29 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Employment Services (NAICS 5613)			
African American	4.62	4.74	97.42
Hispanic	3.88	6.02	64.39
Asian	1.14	1.98	57.65
Native American	0.00	0.99	0.00
Minority	9.63	13.73	70.18
Nonminority female	22.09	17.39	
M/WBE total	31.72	31.11	
Individual and Family Services (NAICS 6241)			
African American	0.51	5.87	8.61 ****
Hispanic	0.91	2.99	30.48 ***
Asian	0.00	0.54	0.00
Native American	0.00	0.00	
Minority	1.42	9.40	15.07 ****
Nonminority female	0.04	27.03	0.14 ****
M/WBE total	1.45	36.43	3.99 ****
Investigation and Security Services (NAICS 5616)			
African American	0.00	5.24	0.00 ***
Hispanic	10.14	11.20	90.58
Asian	0.00	0.03	0.00
Native American	0.00	0.00	
Minority	10.14	16.46	61.61
Nonminority female	9.93	14.48	68.58
M/WBE total	20.07	30.94	64.88
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	1.96	14.19	13.80
M/WBE total	1.96	34.05	5.75 **
Other Telecommunications (NAICS 5179)			
African American	0.00	2.06	0.00 ****
Hispanic	0.00	1.84	0.00 ****
Asian	0.00	0.01	0.00
Native American	0.00	3.04	0.00 ****
Minority	0.00	6.96	0.00 ****
Nonminority female	0.00	3.12	0.00 ****
M/WBE total	0.00	10.09	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	11.11	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.22	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	22.22	0.00 ****
Activities Related to Credit Intermediation (NAICS 5223)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	9.29	0.00
Native American	0.00	8.01	0.00
Minority	0.00	17.31	0.00
Nonminority female	0.00	10.58	0.00
M/WBE total	0.00	27.88	0.00 ****
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	1.28	9.09	14.04
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.28	9.09	14.04
Nonminority female	0.47	9.09	5.12 **
M/WBE total	1.74	18.18	9.58 **
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.75	0.00
M/WBE total	0.00	0.75	0.00
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.12	0.00
Hispanic	24.40	6.31	
Asian	0.00	5.19	0.00 ****
Native American	0.00	0.94	0.00 ****
Minority	24.40	12.57	
Nonminority female	0.00	8.94	0.00 ****
M/WBE total	24.40	21.51	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	1.05	11.88	8.85 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 *
Minority	1.05	17.86	5.89 ****
Nonminority female	22.58	14.68	
M/WBE total	23.63	32.54	72.62
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	1.82	0.00 ****
Hispanic	0.00	8.00	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.82	0.00 ****
Nonminority female	0.00	17.31	0.00 ****
M/WBE total	0.00	27.13	0.00 ****
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)			
African American	4.06	1.30	
Hispanic	6.52	1.75	
Asian	3.58	0.90	
Native American	0.00	0.00	
Minority	14.16	3.94	
Nonminority female	0.00	10.38	0.00 ****
M/WBE total	14.16	14.33	98.81
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	2.15	0.83	
Hispanic	4.54	13.20	34.40 ***
Asian	0.07	0.78	9.36
Native American	0.00	1.28	0.00 ****
Minority	6.77	16.09	42.07 ***
Nonminority female	32.24	12.78	
M/WBE total	39.01	28.87	
Religious Organizations (NAICS 8131)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	0.06	0.00
Asian	0.00	3.68	0.00
Native American	0.00	0.00	
Minority	0.00	9.23	0.00 ****
Nonminority female	0.00	18.35	0.00 ****
M/WBE total	0.00	27.58	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	10.94	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.94	0.00 ****
Nonminority female	6.31	11.73	53.80
M/WBE total	6.31	22.67	27.83 ****
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.07	5.42	1.38 ****
Hispanic	10.22	16.27	62.84
Asian	0.00	0.34	0.00 *
Native American	0.00	0.16	0.00
Minority	10.30	22.19	46.40 ***
Nonminority female	4.96	8.74	56.77
M/WBE total	15.26	30.94	49.33 ***
Vocational Rehabilitation Services (NAICS 6243)			
African American	0.00	2.13	0.00 **
Hispanic	0.00	11.79	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	13.92	0.00 ****
Nonminority female	0.00	8.90	0.00 ****
M/WBE total	0.00	22.82	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	9.85	0.00	
Hispanic	5.82	7.40	78.72
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	15.67	7.40	
Nonminority female	0.16	8.60	1.90 ****
M/WBE total	15.84	16.00	99.01
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)			
African American	0.00	0.00	
Hispanic	0.00	5.09	0.00
Asian	0.00	21.92	0.00
Native American	0.00	0.00	
Minority	0.00	27.01	0.00 ****
Nonminority female	0.00	15.99	0.00
M/WBE total	0.00	43.00	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.08	0.90	9.16
Hispanic	0.03	3.80	0.75
Asian	4.18	2.35	
Native American	0.00	0.00	
Minority	4.29	7.06	60.78
Nonminority female	0.24	16.89	1.42
M/WBE total	4.53	23.95	18.92
Residential Building Construction (NAICS 2361)			
African American	25.13	1.23	
Hispanic	4.93	16.19	30.45 *
Asian	0.00	1.20	0.00
Native American	0.00	0.03	0.00
Minority	30.06	18.64	
Nonminority female	30.24	11.83	
M/WBE total	60.30	30.47	
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.77	0.66	
Hispanic	0.00	6.77	0.05 ****
Asian	0.00	1.13	0.00 ****
Native American	0.00	5.15	0.00 ****
Minority	0.77	13.72	5.65 ****
Nonminority female	5.98	12.40	48.24 **
M/WBE total	6.75	26.11	25.87 ****
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00 ****
Nonminority female	0.00	11.41	0.00 ****
M/WBE total	0.00	22.83	0.00 ****
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	1.02	0.00
Hispanic	6.69	10.84	61.72
Asian	16.29	0.75	
Native American	9.65	0.67	
Minority	32.62	13.27	
Nonminority female	25.21	12.53	
M/WBE total	57.84	25.80	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Finishing Contractors (NAICS 2383)			
African American	8.08	2.21	
Hispanic	56.85	25.66	
Asian	0.00	0.44	0.00 **
Native American	0.00	1.68	0.00 ****
Minority	64.93	29.99	
Nonminority female	0.91	11.20	8.15 ****
M/WBE total	65.85	41.18	
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00
Asian	0.00	15.25	0.00
Native American	0.00	0.00	
Minority	0.00	22.05	0.00 ****
Nonminority female	0.08	11.83	0.65
M/WBE total	0.08	33.87	0.23
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	5.20	9.80	53.08
Asian	65.58	1.96	
Native American	0.00	0.00	
Minority	70.79	11.76	
Nonminority female	8.83	9.15	96.51
M/WBE total	79.62	20.92	
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00 ***
Hispanic	0.21	11.94	1.78 ****
Asian	27.93	11.94	
Native American	0.09	0.00	
Minority	28.23	26.39	
Nonminority female	0.01	13.19	0.10 ****
M/WBE total	28.24	39.58	71.35
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Schools and Instruction (NAICS 6116)			
African American	0.00	5.72	0.00 ****
Hispanic	44.89	13.47	
Asian	0.00	2.94	0.00 ****
Native American	0.00	0.00	
Minority	44.89	22.12	
Nonminority female	0.00	25.09	0.00 ****
M/WBE total	44.89	47.21	95.09
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	3.41	0.00
Asian	0.00	2.73	0.00
Native American	0.00	0.00	
Minority	0.00	6.14	0.00
Nonminority female	0.00	8.12	0.00
M/WBE total	0.00	14.25	0.00 ****
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00
Hispanic	0.00	6.25	0.00
Asian	0.00	6.25	0.00
Native American	0.00	6.25	0.00
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	12.50	0.00
M/WBE total	0.00	37.50	0.00 ****
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	0.00	20.61	0.00 ****
M/WBE total	0.00	65.75	0.00 ****
Radio and Television Broadcasting (NAICS 5151)			
African American	5.92	0.00	
Hispanic	0.00	8.05	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	5.92	8.05	73.44
Nonminority female	0.00	3.30	0.00
M/WBE total	5.92	11.35	52.11

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	3.45	0.12 ****
Hispanic	23.82	11.71	
Asian	0.32	4.96	6.50
Native American	0.00	0.01	0.00
Minority	24.15	20.14	
Nonminority female	43.83	29.66	
M/WBE total	67.97	49.80	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	4.19	0.00 ****
Asian	0.00	0.11	0.00
Native American	0.00	0.00	
Minority	0.00	4.30	0.00 ****
Nonminority female	0.14	9.14	1.48 ***
M/WBE total	0.14	13.45	1.01 ***
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	0.00	7.97	0.00
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	0.00	15.95	0.00 ****
Nonminority female	20.04	23.51	85.23
M/WBE total	20.04	39.46	50.79 **
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	8.53	50.00	17.07 ****
M/WBE total	8.53	50.00	17.07 ****
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	0.00	1.19	0.00 **
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	0.00	1.98	0.00 **
Nonminority female	0.00	13.38	0.00 ****
M/WBE total	0.00	15.36	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00 ****
Asian	1.93	4.00	48.29
Native American	0.00	0.00	
Minority	1.93	12.80	15.09
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	1.93	27.60	7.00 ****
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
General Freight Trucking (NAICS 4841)			
African American	25.41	11.44	
Hispanic	56.20	21.69	
Asian	1.07	0.34	
Native American	16.86	3.34	
Minority	99.54	36.81	
Nonminority female	0.28	7.78	3.54 ***
M/WBE total	99.81	44.59	
Offices of Other Health Practitioners (NAICS 6213)			
African American	0.73	0.14	
Hispanic	0.19	0.00	
Asian	0.04	4.49	0.85 **
Native American	0.00	1.18	0.00
Minority	0.96	5.82	16.56
Nonminority female	0.08	53.94	0.15 ****
M/WBE total	1.04	59.75	1.75 ****
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)			
African American	0.00	3.97	0.00
Hispanic	0.00	15.37	0.00 ****
Asian	0.00	5.12	0.00
Native American	0.00	0.00	
Minority	0.00	24.46	0.00 ****
Nonminority female	0.00	12.80	0.00 ****
M/WBE total	0.00	37.26	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Child Day Care Services (NAICS 6244)			
African American	0.00	1.13	0.00
Hispanic	0.00	1.91	0.00
Asian	0.00	0.69	0.00
Native American	0.00	0.13	0.00
Minority	0.00	3.86	0.00
Nonminority female	0.00	8.82	0.00 ****
M/WBE total	0.00	12.68	0.00 ****
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.00	
Hispanic	0.00	14.80	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.80	0.00 ****
Nonminority female	0.00	3.31	0.00 ****
M/WBE total	0.00	18.11	0.00 ****
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00 ****
M/WBE total	0.00	48.18	0.00 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	100.00	7.00	
M/WBE total	100.00	7.00	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00 ****
M/WBE total	100.00	13.74	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Special Food Services (NAICS 7223)			
African American	0.00	11.81	0.00
Hispanic	19.88	3.46	
Asian	0.00	0.09	0.00
Native American	0.00	0.00	
Minority	19.88	15.35	
Nonminority female	0.00	13.04	0.00
M/WBE total	19.88	28.39	70.03
Social Advocacy Organizations (NAICS 8133)			
African American	0.00	0.55	0.00
Hispanic	0.00	2.71	0.00
Asian	0.00	1.26	0.00
Native American	0.00	0.00	
Minority	0.00	4.53	0.00
Nonminority female	0.00	5.06	0.00
M/WBE total	0.00	9.59	0.00
Medical and Diagnostic Laboratories (NAICS 6215)			
African American	0.00	0.00	
Hispanic	0.00	1.32	0.00
Asian	0.00	1.32	0.00
Native American	0.00	0.00	
Minority	0.00	2.63	0.00
Nonminority female	0.00	3.95	0.00
M/WBE total	0.00	6.58	0.00 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.62	0.00
Hispanic	1.63	3.45	47.41
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	1.63	7.52	21.72
Nonminority female	0.24	6.02	4.03 **
M/WBE total	1.88	13.54	13.86 **
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.75	0.00
Hispanic	0.00	3.73	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.00	
Minority	0.00	4.73	0.00
Nonminority female	0.00	7.71	0.00
M/WBE total	0.00	12.44	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00
Hispanic	3.28	2.34	
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	3.28	3.59	91.13
Nonminority female	56.42	11.53	
M/WBE total	59.69	15.13	
Department Stores (NAICS 4521)			
African American	0.00	1.03	0.00
Hispanic	0.00	5.49	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.52	0.00
Nonminority female	0.00	7.58	0.00
M/WBE total	0.00	14.10	0.00
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	14.40	0.00	
Hispanic	0.84	0.93	91.15
Asian	0.05	0.93	5.10
Native American	0.00	3.67	0.00 ****
Minority	15.30	5.52	
Nonminority female	20.96	13.78	
M/WBE total	36.25	19.30	
Support Activities for Road Transportation (NAICS 4884)			
African American	0.00	11.43	0.00
Hispanic	0.00	18.81	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	30.24	0.00 ****
Nonminority female	0.03	28.33	0.10
M/WBE total	0.03	58.57	0.05 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Direct Selling Establishments (NAICS 4543)			
African American	0.00	2.59	0.00 **
Hispanic	0.00	4.78	0.00 **
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.37	0.00 ****
Nonminority female	33.43	22.23	
M/WBE total	33.43	29.60	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	0.00	23.39	0.00 ****
M/WBE total	0.00	37.90	0.00 ****
Drycleaning and Laundry Services (NAICS 8123)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	10.00	0.00 ****
M/WBE total	0.00	10.00	0.00 ****
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.89	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.89	0.00 ****
Nonminority female	41.54	0.00	
M/WBE total	41.54	3.89	
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00 ****
Nonminority female	0.00	11.09	0.00 ****
M/WBE total	0.00	23.35	0.00 ****
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	78.84	0.00	
Native American	0.00	0.14	0.00
Minority	78.84	0.88	
Nonminority female	2.88	5.29	54.43
M/WBE total	81.72	6.17	
Grantmaking and Giving Services (NAICS 8132)			
African American	85.72	5.56	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	85.72	5.56	
Nonminority female	0.00	0.00	
M/WBE total	85.72	5.56	
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	0.00	12.27	0.00 ****
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.01	0.00 ****
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	0.00	22.63	0.00 ****
General Medical and Surgical Hospitals (NAICS 6221)			
African American	0.00	0.00	
Hispanic	0.00	3.08	0.00
Asian	0.00	0.00	
Native American	0.00	8.67	0.00
Minority	0.00	11.75	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	13.29	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.00	
Hispanic	0.00	0.85	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.85	0.00
Nonminority female	0.00	9.40	0.00
M/WBE total	0.00	10.26	0.00
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00 ****
Hispanic	2.31	5.58	41.47
Asian	0.00	1.19	0.00 ****
Native American	0.00	0.00	
Minority	2.31	12.35	18.74
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	2.31	35.34	6.55 ****
Cable and Other Subscription Programming (NAICS 5152)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	1.54	0.00
Native American	0.00	1.54	0.00
Minority	0.00	3.08	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	4.62	0.00
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	7.27	0.00
Hispanic	0.00	21.82	0.00 **
Asian	0.00	0.00	
Native American	0.00	1.82	0.00
Minority	0.00	30.91	0.00 **
Nonminority female	43.42	9.09	
M/WBE total	43.42	40.00	
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)			
African American	0.00	0.00	
Hispanic	100.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	0.00	
Nonminority female	0.00	18.18	0.00
M/WBE total	100.00	18.18	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Death Care Services (NAICS 8122)			
African American	0.00	0.00	
Hispanic	0.00	9.52	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.52	0.00
Nonminority female	0.00	9.52	0.00
M/WBE total	0.00	19.05	0.00 ****
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	11.11	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.11	0.00 ****
Nonminority female	0.00	11.11	0.00 ****
M/WBE total	0.00	22.22	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	23.11	5.80	
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	23.11	16.74	
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	23.11	27.89	82.83
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	6.90	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.90	0.00 ****
Nonminority female	0.00	10.34	0.00 ****
M/WBE total	0.00	17.24	0.00 ****
Other Residential Care Facilities (NAICS 6239)			
African American	0.00	5.26	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	15.79	0.00
M/WBE total	0.00	21.05	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	10.93	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.93	0.00
Nonminority female	17.08	23.49	72.73
M/WBE total	17.08	34.42	49.63
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00
Nonminority female	0.00	10.15	0.00 ****
M/WBE total	0.00	16.12	0.00 ****
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	8.33	0.00 ****
M/WBE total	0.00	8.33	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	0.99	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	0.99	1.06	92.83
Nonminority female	75.17	63.45	
M/WBE total	76.15	64.52	
Other Amusement and Recreation Industries (NAICS 7139)			
African American	0.00	0.36	0.00
Hispanic	47.75	1.19	
Asian	0.00	0.36	0.00
Native American	0.00	0.00	
Minority	47.75	1.92	
Nonminority female	52.25	97.97	53.34 ****
M/WBE total	100.00	99.88	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	11.32	0.00 ****
Hispanic	0.00	5.66	0.00 ****
Asian	0.00	3.77	0.00 ****
Native American	0.00	0.00	
Minority	0.00	20.75	0.00 ****
Nonminority female	0.00	35.66	0.00 ****
M/WBE total	0.00	56.42	0.00 ****
Business Schools and Computer and Management Training (NAICS 6114)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00
Asian	0.00	4.55	0.00
Native American	0.00	4.55	0.00
Minority	0.00	18.18	0.00
Nonminority female	0.00	13.64	0.00
M/WBE total	0.00	31.82	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ****
Asian	0.00	9.49	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Converted Paper Product Manufacturing (NAICS 3222)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	25.00	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Restaurants and Other Eating Places (NAICS 7225)			
African American	0.00	0.61	0.00
Hispanic	73.89	2.77	
Asian	0.43	2.70	15.81
Native American	0.00	0.04	0.00
Minority	74.31	6.13	
Nonminority female	0.00	0.71	0.00
M/WBE total	74.31	6.84	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	2.00	2.75	72.57
M/WBE total	2.00	11.62	17.19
Activities Related to Real Estate (NAICS 5313)			
African American	0.00	0.68	0.00
Hispanic	0.00	1.36	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	2.04	0.00
Nonminority female	12.73	33.93	37.52
M/WBE total	12.73	35.97	35.39
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00 ****
M/WBE total	0.00	10.71	0.00 ****
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Nondepository Credit Intermediation (NAICS 5222)			
African American	0.00	8.07	0.00
Hispanic	0.00	0.63	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.70	0.00 ****
Nonminority female	0.00	2.52	0.00
M/WBE total	0.00	11.22	0.00 ****

Source and Notes: *See* Table 6.8.

**Table AD.22. Industry Group Utilization, Availability, and Disparity Results for City of Austin
Nonprofessional Services Contracting—Contracts without M/WBE Goals (Dollars Paid)**

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Insurance Carriers (NAICS 5241)			
African American	0.00	2.61	0.00 ****
Hispanic	0.00	2.28	0.00 ****
Asian	0.00	0.24	0.00
Native American	0.00	0.00	
Minority	0.00	5.12	0.00 ****
Nonminority female	0.08	8.63	0.91 ***
M/WBE total	0.08	13.76	0.57 ****
Business Support Services (NAICS 5614)			
African American	0.28	3.85	7.37
Hispanic	2.02	4.10	49.22
Asian	0.00	0.25	0.81
Native American	0.00	0.04	0.00
Minority	2.31	8.25	27.94
Nonminority female	4.29	10.18	42.11
M/WBE total	6.59	18.43	35.77
Services to Buildings and Dwellings (NAICS 5617)			
African American	14.12	0.49	
Hispanic	2.72	18.30	14.88 ***
Asian	0.71	0.24	
Native American	0.00	0.14	0.00
Minority	17.56	19.17	91.58
Nonminority female	0.99	7.21	13.67
M/WBE total	18.54	26.38	70.30
Computer Systems Design and Related Services (NAICS 5415)			
African American	0.04	1.57	2.32 ****
Hispanic	0.14	9.55	1.44 ****
Asian	2.35	3.02	77.87
Native American	0.35	0.19	
Minority	2.88	14.34	20.07 ****
Nonminority female	41.76	11.15	
M/WBE total	44.64	25.49	
Advertising, Public Relations, and Related Services (NAICS 5418)			
African American	0.54	0.57	94.54
Hispanic	0.51	5.13	9.85
Asian	7.90	2.26	
Native American	0.00	0.00	
Minority	8.94	7.97	
Nonminority female	3.56	32.39	10.98 **
M/WBE total	12.50	40.36	30.97 **

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	3.88	0.00 ****
Hispanic	0.00	5.41	0.00 ****
Asian	11.24	1.26	
Native American	0.00	0.00	
Minority	11.24	10.55	
Nonminority female	0.00	15.43	0.00 ****
M/WBE total	11.24	25.98	43.27
Building Equipment Contractors (NAICS 2382)			
African American	13.65	1.14	
Hispanic	12.15	6.63	
Asian	0.56	1.39	40.66
Native American	0.00	0.29	0.00 **
Minority	26.37	9.45	
Nonminority female	1.19	6.75	17.59 ***
M/WBE total	27.56	16.20	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.51	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	1.03	0.00 **
Nonminority female	0.20	0.91	22.44
M/WBE total	0.20	1.94	10.55
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	3.48	1.69	
Hispanic	10.07	8.09	
Asian	2.68	3.76	71.32
Native American	0.72	0.64	
Minority	16.95	14.18	
Nonminority female	12.01	8.40	
M/WBE total	28.96	22.58	
Other Personal Services (NAICS 8129)			
African American	0.00	2.95	0.00
Hispanic	0.00	4.90	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.85	0.00 ****
Nonminority female	0.00	9.29	0.00 ****
M/WBE total	0.00	17.14	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Nonresidential Building Construction (NAICS 2362)			
African American	1.60	2.24	71.26
Hispanic	1.30	7.35	17.63
Asian	3.28	0.90	
Native American	0.00	0.77	0.00 *
Minority	6.18	11.27	54.82
Nonminority female	4.22	10.33	40.82
M/WBE total	10.39	21.60	48.12
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	1.98	0.00 ****
Hispanic	1.35	8.41	15.99 ****
Asian	55.83	7.69	
Native American	0.00	4.07	0.00 ****
Minority	57.18	22.15	
Nonminority female	9.20	7.49	
M/WBE total	66.38	29.64	
Individual and Family Services (NAICS 6241)			
African American	0.52	5.85	8.82 ****
Hispanic	0.94	2.93	32.24 ***
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	1.46	9.29	15.72 ****
Nonminority female	0.00	26.79	0.00 ****
M/WBE total	1.46	36.08	4.05 ****
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance (NAICS 8113)			
African American	0.00	0.57	0.00
Hispanic	0.00	15.04	0.00 ****
Asian	0.00	4.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	19.86	0.00 ****
Nonminority female	4.66	14.19	32.83
M/WBE total	4.66	34.05	13.68
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	11.11	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.22	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	22.22	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	7.43	5.35	
Hispanic	21.44	7.67	
Asian	0.00	7.27	0.00 ****
Native American	0.00	0.36	0.00 ***
Minority	28.86	20.65	
Nonminority female	5.73	17.44	32.85 ****
M/WBE total	34.59	38.09	90.82
Activities Related to Credit Intermediation (NAICS 5223)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	9.29	0.00
Native American	0.00	8.01	0.00
Minority	0.00	17.31	0.00
Nonminority female	0.00	10.58	0.00
M/WBE total	0.00	27.88	0.00 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 ***
Hispanic	0.00	1.05	0.00 ***
Asian	4.29	13.53	31.71 ****
Native American	0.00	0.00	
Minority	4.29	15.77	27.21 ****
Nonminority female	1.24	5.04	24.57 **
M/WBE total	5.53	20.81	26.57 ****
Investigation and Security Services (NAICS 5616)			
African American	0.06	5.23	1.14 ***
Hispanic	11.13	11.19	99.46
Asian	0.00	0.03	0.00
Native American	0.00	0.00	
Minority	11.19	16.45	68.01
Nonminority female	1.75	14.48	12.12 *
M/WBE total	12.94	30.93	41.84
Employment Services (NAICS 5613)			
African American	3.11	4.67	66.69
Hispanic	4.37	6.03	72.35
Asian	0.00	2.01	0.00 ****
Native American	0.00	1.01	0.00 ****
Minority	7.48	13.72	54.50
Nonminority female	21.28	17.11	
M/WBE total	28.76	30.83	93.28

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 **
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	0.00	3.12	0.00 **
Minority	0.00	6.25	0.00 ****
Nonminority female	0.00	3.12	0.00 **
M/WBE total	0.00	9.38	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.58	0.00
M/WBE total	0.00	0.58	0.00
Community Food and Housing, and Emergency and Other Relief Services (NAICS 6242)			
African American	0.00	10.91	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.91	0.00 ****
Nonminority female	1.03	0.54	
M/WBE total	1.03	11.45	8.97 ****
Waste Collection (NAICS 5621)			
African American	0.00	0.00	
Hispanic	1.03	9.09	11.33
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	1.03	9.09	11.33
Nonminority female	0.59	9.09	6.47 *
M/WBE total	1.62	18.18	8.90 **
Religious Organizations (NAICS 8131)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	0.06	0.00
Asian	0.00	3.68	0.00
Native American	0.00	0.00	
Minority	0.00	9.23	0.00 ****
Nonminority female	0.00	18.35	0.00 ****
M/WBE total	0.00	27.58	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Business, Professional, Labor, Political, and Similar Organizations (NAICS 8139)			
African American	4.00	1.30	
Hispanic	7.00	1.75	
Asian	3.69	0.90	
Native American	0.00	0.00	
Minority	14.69	3.94	
Nonminority female	0.00	10.38	0.00 ****
M/WBE total	14.69	14.33	
Vocational Rehabilitation Services (NAICS 6243)			
African American	0.00	2.13	0.00 ****
Hispanic	0.00	11.79	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	13.92	0.00 ****
Nonminority female	0.00	8.90	0.00 ****
M/WBE total	0.00	22.82	0.00 ****
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.00	0.11	0.00
Hispanic	3.31	6.34	52.31
Asian	0.00	5.23	0.00 ****
Native American	0.00	0.94	0.00 ****
Minority	3.31	12.62	26.27 ***
Nonminority female	0.00	8.97	0.00 ****
M/WBE total	3.31	21.59	15.36 ****
Residential Building Construction (NAICS 2361)			
African American	23.20	1.19	
Hispanic	7.92	16.50	48.03
Asian	0.00	1.11	0.00 ***
Native American	0.00	0.03	0.00
Minority	31.12	18.81	
Nonminority female	27.80	11.72	
M/WBE total	58.93	30.53	
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	1.44	0.00 ***
Hispanic	0.00	9.09	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.54	0.00 ****
Nonminority female	0.01	21.90	0.05 ****
M/WBE total	0.01	32.44	0.03 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Remediation and Other Waste Management Services (NAICS 5629)			
African American	10.60	0.00	
Hispanic	6.03	7.41	81.41
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	16.63	7.41	
Nonminority female	0.08	8.60	0.92 ****
M/WBE total	16.71	16.01	
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	5.75	0.00 ****
Hispanic	10.84	16.14	67.17
Asian	0.00	0.37	0.00 **
Native American	0.00	0.18	0.00
Minority	10.84	22.43	48.32 ***
Nonminority female	5.71	8.56	66.74
M/WBE total	16.55	30.99	53.41 ***
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	0.98	0.00 ***
Hispanic	6.24	16.18	38.57 ***
Asian	0.11	0.91	12.08
Native American	0.00	1.69	0.00 ****
Minority	6.35	19.77	32.13 ****
Nonminority female	16.71	14.99	
M/WBE total	23.06	34.76	66.35 *
Wireless Telecommunications Carriers (except Satellite) (NAICS 5172)			
African American	0.00	0.00	
Hispanic	0.00	5.09	0.00
Asian	0.00	21.92	0.00 ****
Native American	0.00	0.00	
Minority	0.00	27.01	0.00 ****
Nonminority female	0.00	15.99	0.00 ****
M/WBE total	0.00	43.00	0.00 ****
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.00	12.59	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	12.59	0.00 ****
Nonminority female	2.64	11.55	22.87 **
M/WBE total	2.64	24.14	10.94 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.00	11.41	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.41	0.00 ****
Nonminority female	0.00	11.41	0.00 ****
M/WBE total	0.00	22.83	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	1.39	11.88	11.72 ***
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00
Minority	1.39	17.86	7.80 ****
Nonminority female	40.89	14.68	
M/WBE total	42.28	32.54	
Offices of Physicians (NAICS 6211)			
African American	0.00	0.29	0.00
Hispanic	0.00	6.51	0.00
Asian	0.00	15.25	0.00 ****
Native American	0.00	0.00	
Minority	0.00	22.05	0.00 ****
Nonminority female	0.06	11.83	0.52
M/WBE total	0.06	33.87	0.18
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.21	0.73	29.32
Hispanic	0.00	6.85	0.05 ****
Asian	0.00	1.28	0.00 ****
Native American	0.00	4.46	0.00 ****
Minority	0.22	13.33	1.64 ****
Nonminority female	4.89	11.65	41.99 **
M/WBE total	5.11	24.98	20.46 ****
Building Finishing Contractors (NAICS 2383)			
African American	8.03	2.15	
Hispanic	57.17	26.23	
Asian	0.00	0.58	0.00 **
Native American	0.00	1.67	0.00 ****
Minority	65.20	30.64	
Nonminority female	1.06	11.07	9.56 ****
M/WBE total	66.26	41.71	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.10	0.90	10.67
Hispanic	9.03	3.80	
Asian	17.43	2.35	
Native American	0.00	0.00	
Minority	26.56	7.06	
Nonminority female	0.49	16.89	2.91
M/WBE total	27.05	23.95	
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Other Schools and Instruction (NAICS 6116)			
African American	0.00	5.77	0.00 ****
Hispanic	44.69	13.46	
Asian	0.00	2.96	0.00 ****
Native American	0.00	0.00	
Minority	44.69	22.20	
Nonminority female	0.00	25.05	0.00 ****
M/WBE total	44.69	47.25	94.59
Other Heavy and Civil Engineering Construction (NAICS 2379)			
African American	0.00	0.00	
Hispanic	5.25	9.80	53.53
Asian	66.04	1.96	
Native American	0.00	0.00	
Minority	71.29	11.76	
Nonminority female	8.90	9.15	97.23
M/WBE total	80.19	20.92	
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	3.41	0.00
Asian	0.00	2.73	0.00
Native American	0.00	0.00	
Minority	0.00	6.14	0.00
Nonminority female	0.00	8.12	0.00
M/WBE total	0.00	14.25	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	0.92	0.00
Hispanic	8.48	9.47	89.54
Asian	0.23	0.67	34.76
Native American	12.89	0.59	
Minority	21.61	11.65	
Nonminority female	29.82	11.42	
M/WBE total	51.43	23.07	
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00 ****
Hispanic	0.00	6.25	0.00 ****
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	37.50	0.00 ****
Special Food Services (NAICS 7223)			
African American	0.00	13.25	0.00 ****
Hispanic	8.32	1.45	
Asian	0.00	0.04	0.00
Native American	0.00	0.00	
Minority	8.32	14.73	56.44
Nonminority female	0.00	5.45	0.00 ****
M/WBE total	8.32	20.19	41.19
Radio and Television Broadcasting (NAICS 5151)			
African American	4.97	0.00	
Hispanic	0.00	7.80	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	4.97	7.80	63.68
Nonminority female	0.00	3.33	0.00
M/WBE total	4.97	11.13	44.62
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	0.00	20.61	0.00 ****
M/WBE total	0.00	65.75	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	0.00	4.29	0.00 ****
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	4.40	0.00 ****
Nonminority female	0.06	8.88	0.63 ***
M/WBE total	0.06	13.28	0.42 ***
Land Subdivision (NAICS 2372)			
African American	0.00	0.40	0.00
Hispanic	0.00	7.97	0.00
Asian	0.00	0.00	
Native American	0.00	7.57	0.00
Minority	0.00	15.95	0.00 ***
Nonminority female	20.92	23.51	88.97
M/WBE total	20.92	39.46	53.02 *
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	3.41	0.14 ***
Hispanic	27.09	11.90	
Asian	0.00	4.96	0.00 ****
Native American	0.00	0.01	0.00
Minority	27.09	20.28	
Nonminority female	49.73	29.44	
M/WBE total	76.83	49.72	
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	9.64	50.00	19.27 ****
M/WBE total	9.64	50.00	19.27 ****
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00
Asian	1.96	4.00	48.92
Native American	0.00	0.00	
Minority	1.96	12.80	15.29
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	1.96	27.60	7.09 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Legal Services (NAICS 5411)			
African American	0.00	0.71	0.00
Hispanic	0.12	1.19	10.24
Asian	0.00	0.07	0.00
Native American	0.00	0.00	
Minority	0.12	1.98	6.18
Nonminority female	0.00	13.38	0.00 ****
M/WBE total	0.12	15.36	0.80 ****
Offices of Other Health Practitioners (NAICS 6213)			
African American	0.76	0.14	
Hispanic	0.20	0.00	
Asian	0.04	4.55	0.86
Native American	0.00	1.15	0.00
Minority	0.99	5.84	17.01
Nonminority female	0.08	53.71	0.16 ****
M/WBE total	1.08	59.55	1.81 ****
Nursing Care Facilities (Skilled Nursing Facilities) (NAICS 6231)			
African American	0.00	3.97	0.00
Hispanic	0.00	15.37	0.00 ****
Asian	0.00	5.12	0.00
Native American	0.00	0.00	
Minority	0.00	24.46	0.00 ****
Nonminority female	0.00	12.80	0.00 ****
M/WBE total	0.00	37.26	0.00 ****
Automotive Equipment Rental and Leasing (NAICS 5321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Child Day Care Services (NAICS 6244)			
African American	0.00	1.13	0.00
Hispanic	0.00	1.91	0.00
Asian	0.00	0.69	0.00
Native American	0.00	0.13	0.00
Minority	0.00	3.86	0.00
Nonminority female	0.00	8.82	0.00 ****
M/WBE total	0.00	12.68	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.00	
Hispanic	0.00	14.26	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.26	0.00 ****
Nonminority female	0.00	2.99	0.00 ***
M/WBE total	0.00	17.25	0.00 ****
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	0.00	
Hispanic	0.00	36.66	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	36.66	0.00 ****
Nonminority female	0.00	11.52	0.00 ****
M/WBE total	0.00	48.18	0.00 ****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	2.50	0.00
Hispanic	0.68	11.94	5.66 ****
Asian	68.43	11.94	
Native American	0.00	0.00	
Minority	69.11	26.39	
Nonminority female	0.04	13.19	0.33 ****
M/WBE total	69.15	39.58	
Social Advocacy Organizations (NAICS 8133)			
African American	0.00	0.53	0.00
Hispanic	0.00	2.59	0.00
Asian	0.00	1.21	0.00
Native American	0.00	0.00	
Minority	0.00	4.33	0.00
Nonminority female	0.00	4.83	0.00
M/WBE total	0.00	9.16	0.00
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.60	0.00 ***
Hispanic	1.58	3.46	45.66
Asian	0.00	3.50	0.00 ****
Native American	0.00	0.00	
Minority	1.58	7.56	20.91
Nonminority female	0.23	5.98	3.93 **
M/WBE total	1.82	13.54	13.41 **

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
General Freight Trucking (NAICS 4841)			
African American	28.09	11.44	
Hispanic	45.33	21.69	
Asian	2.71	0.34	
Native American	22.66	3.34	
Minority	98.79	36.81	
Nonminority female	0.96	7.78	12.35
M/WBE total	99.75	44.59	
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	100.00	7.00	
M/WBE total	100.00	7.00	
Medical and Diagnostic Laboratories (NAICS 6215)			
African American	0.00	0.00	
Hispanic	0.00	1.32	0.00
Asian	0.00	1.32	0.00
Native American	0.00	0.00	
Minority	0.00	2.63	0.00
Nonminority female	0.00	3.95	0.00
M/WBE total	0.00	6.58	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.74	0.00
Hispanic	0.00	3.76	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.00	
Minority	0.00	4.75	0.00
Nonminority female	0.00	7.77	0.00
M/WBE total	0.00	12.53	0.00 ****
Department Stores (NAICS 4521)			
African American	0.00	1.03	0.00
Hispanic	0.00	5.49	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.52	0.00
Nonminority female	0.00	7.58	0.00
M/WBE total	0.00	14.10	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00
Printing and Related Support Activities (NAICS 3231)			
African American	0.00	0.94	0.00 **
Hispanic	0.00	2.34	0.00 ****
Asian	0.00	0.31	0.00
Native American	0.00	0.00	
Minority	0.00	3.59	0.00 ****
Nonminority female	55.22	11.53	
M/WBE total	55.22	15.13	
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	3.06	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	38.11	0.00	
M/WBE total	38.11	3.06	
Support Activities for Road Transportation (NAICS 4884)			
African American	0.00	11.43	0.00
Hispanic	0.00	18.81	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	30.24	0.00 ****
Nonminority female	0.00	28.33	0.00 ****
M/WBE total	0.00	58.57	0.00 ****
Direct Selling Establishments (NAICS 4543)			
African American	0.00	2.64	0.00 **
Hispanic	0.00	4.81	0.00 **
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.45	0.00 ****
Nonminority female	34.21	22.48	
M/WBE total	34.21	29.93	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Drycleaning and Laundry Services (NAICS 8123)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	10.00	0.00 ****
M/WBE total	0.00	10.00	0.00 ****
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.03	0.00
Hispanic	0.00	0.90	0.00
Asian	0.00	0.03	0.00
Native American	0.00	0.00	
Minority	0.00	0.97	0.00
Nonminority female	0.00	14.91	0.00 ****
M/WBE total	0.00	15.87	0.00 ****
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	0.00	23.39	0.00 ****
M/WBE total	0.00	37.90	0.00 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.00	
Hispanic	1.11	0.93	
Asian	0.07	0.93	7.99
Native American	0.00	3.67	0.00 ****
Minority	1.19	5.52	21.54
Nonminority female	18.57	13.78	
M/WBE total	19.76	19.30	
Gasoline Stations (NAICS 4471)			
African American	0.00	0.51	0.00
Hispanic	0.00	3.95	0.00
Asian	100.00	2.03	
Native American	0.00	0.00	
Minority	100.00	6.49	
Nonminority female	0.00	7.25	0.00
M/WBE total	100.00	13.74	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Civic and Social Organizations (NAICS 8134)			
African American	0.00	4.60	0.00
Hispanic	0.00	4.60	0.00
Asian	0.00	3.07	0.00
Native American	0.00	0.00	
Minority	0.00	12.26	0.00 ****
Nonminority female	0.00	11.09	0.00 ****
M/WBE total	0.00	23.35	0.00 ****
Grantmaking and Giving Services (NAICS 8132)			
African American	84.76	5.56	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	84.76	5.56	
Nonminority female	0.00	0.00	
M/WBE total	84.76	5.56	
General Medical and Surgical Hospitals (NAICS 6221)			
African American	0.00	0.00	
Hispanic	0.00	3.08	0.00
Asian	0.00	0.00	
Native American	0.00	8.67	0.00
Minority	0.00	11.75	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	13.29	0.00
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	100.00	0.00	
Native American	0.00	0.14	0.00
Minority	100.00	0.88	
Nonminority female	0.00	5.29	0.00 ****
M/WBE total	100.00	6.17	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Greenhouse, Nursery, and Floriculture Production (NAICS 1114)			
African American	0.00	0.00	
Hispanic	100.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	0.00	
Nonminority female	0.00	18.18	0.00
M/WBE total	100.00	18.18	
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	0.00	5.58	0.00 ****
Hispanic	2.55	5.58	45.71
Asian	0.00	1.19	0.00 *
Native American	0.00	0.00	
Minority	2.55	12.35	20.65
Nonminority female	0.00	22.99	0.00 ****
M/WBE total	2.55	35.34	7.22 ****
Specialized Freight Trucking (NAICS 4842)			
African American	0.00	7.27	0.00 ****
Hispanic	0.65	21.82	2.99 **
Asian	0.00	0.00	
Native American	0.00	1.82	0.00
Minority	0.65	30.91	2.11 **
Nonminority female	39.83	9.09	
M/WBE total	40.48	40.00	
Death Care Services (NAICS 8122)			
African American	0.00	0.00	
Hispanic	0.00	9.52	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.52	0.00
Nonminority female	0.00	9.52	0.00
M/WBE total	0.00	19.05	0.00 ****
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	11.11	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.11	0.00 ****
Nonminority female	0.00	11.11	0.00 ****
M/WBE total	0.00	22.22	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	0.00	12.27	0.00 ****
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.01	0.00 ****
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	0.00	22.63	0.00 ****
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	8.33	0.00 ****
M/WBE total	0.00	8.33	0.00 ****
Other Residential Care Facilities (NAICS 6239)			
African American	0.00	5.26	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.26	0.00
Nonminority female	0.00	15.79	0.00
M/WBE total	0.00	21.05	0.00
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	6.90	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.90	0.00 ****
Nonminority female	0.00	10.34	0.00 ****
M/WBE total	0.00	17.24	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	30.79	5.80	
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	30.79	16.74	
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	30.79	27.89	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Museums, Historical Sites, and Similar Institutions (NAICS 7121)			
African American	0.00	10.93	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.93	0.00
Nonminority female	17.08	23.49	72.73
M/WBE total	17.08	34.42	49.63
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	0.00	1.49	0.00
Native American	0.00	1.49	0.00
Minority	0.00	5.97	0.00
Nonminority female	0.00	10.15	0.00 ****
M/WBE total	0.00	16.12	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	1.13	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	1.06	0.00
Minority	1.13	1.06	
Nonminority female	85.80	63.45	
M/WBE total	86.93	64.52	
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	2.21	2.75	80.34
M/WBE total	2.21	11.62	19.03
Other Amusement and Recreation Industries (NAICS 7139)			
African American	0.00	0.36	0.00
Hispanic	47.72	1.19	
Asian	0.00	0.36	0.00
Native American	0.00	0.00	
Minority	47.72	1.92	
Nonminority female	52.28	97.97	53.36 ****
M/WBE total	100.00	99.88	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	11.32	0.00 ****
Hispanic	0.00	5.66	0.00 ****
Asian	0.00	3.77	0.00 ****
Native American	0.00	0.00	
Minority	0.00	20.75	0.00 ****
Nonminority female	0.00	35.66	0.00 ****
M/WBE total	0.00	56.42	0.00 ****
Cable and Other Subscription Programming (NAICS 5152)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	1.54	0.00
Native American	0.00	1.54	0.00
Minority	0.00	3.08	0.00
Nonminority female	0.00	1.54	0.00
M/WBE total	0.00	4.62	0.00
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ***
Asian	0.00	9.49	0.00 ***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Converted Paper Product Manufacturing (NAICS 3222)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	25.00	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Restaurants and Other Eating Places (NAICS 7225)			
African American	0.00	0.61	0.00
Hispanic	74.60	2.77	
Asian	0.00	2.70	0.00
Native American	0.00	0.04	0.00
Minority	74.60	6.13	
Nonminority female	0.00	0.71	0.00
M/WBE total	74.60	6.84	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Information Services (NAICS 5191)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	2.98	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	2.98	0.00
Nonminority female	0.00	17.86	0.00
M/WBE total	0.00	20.83	0.00
Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 3311)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00
Other Motor Vehicle Dealers (NAICS 4412)			
African American	0.00	0.56	0.00
Hispanic	0.00	0.56	0.00
Asian	0.00	24.16	0.00 ****
Native American	0.00	0.00	
Minority	0.00	25.28	0.00 ****
Nonminority female	0.00	12.08	0.00 ****
M/WBE total	0.00	37.36	0.00 ****

Source and Notes: See Table 6.8.

Table AD.23. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting—Contracts without M/WBE Goals (Dollars Awarded)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.05	0.02	
Hispanic	3.23	6.59	49.10
Asian	0.00	5.63	0.00 ****
Native American	0.00	0.93	0.00 ****
Minority	3.28	13.16	24.91 ***
Nonminority female	0.44	9.21	4.75 ****
M/WBE total	3.72	22.37	16.61 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	16.51	0.00 ****
M/WBE total	0.00	16.51	0.00 ****
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.65	7.79	8.37 ***
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.65	7.79	8.37 ***
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	0.65	19.85	3.28 ****
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	1.43	0.00 ****
Hispanic	0.09	9.34	0.92 ****
Asian	0.00	2.27	0.00 ****
Native American	2.57	3.17	80.98
Minority	2.65	16.21	16.36 ****
Nonminority female	0.70	15.38	4.52 ****
M/WBE total	3.35	31.59	10.59 ****
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	7.08	12.27	57.67
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	7.08	18.01	39.28 ***
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	7.08	22.63	31.28 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.65	0.00
Hispanic	0.10	20.19	0.52 ****
Asian	0.00	0.16	0.00
Native American	0.00	0.32	0.00
Minority	0.10	21.32	0.49 ****
Nonminority female	0.00	8.54	0.00 ****
M/WBE total	0.10	29.87	0.35 ****
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	4.71	0.00 ****
Hispanic	12.70	8.32	
Asian	6.95	4.04	
Native American	1.08	2.25	48.19
Minority	20.74	19.31	
Nonminority female	23.62	11.06	
M/WBE total	44.36	30.37	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.82	0.00 ****
Hispanic	0.00	7.53	0.00 ****
Asian	0.00	0.74	0.00 *
Native American	0.00	0.63	0.00 *
Minority	0.00	10.72	0.00 ****
Nonminority female	0.00	11.51	0.00 ****
M/WBE total	0.00	22.23	0.00 ****
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.19	8.04	2.42 ***
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.19	8.04	2.42 ***
Nonminority female	0.00	18.59	0.00 ****
M/WBE total	0.19	26.63	0.73 ****
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Navigation, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.33	0.00
Asian	0.00	5.81	0.00 ****
Native American	0.00	0.00	
Minority	0.00	6.14	0.00 ****
Nonminority female	1.12	4.08	27.44
M/WBE total	1.12	10.22	10.94 **
Building Equipment Contractors (NAICS 2382)			
African American	0.00	0.55	0.00 ****
Hispanic	0.77	5.30	14.49 ***
Asian	0.00	2.21	0.00 ****
Native American	0.00	0.06	0.00
Minority	0.77	8.11	9.46 ****
Nonminority female	2.82	6.16	45.73
M/WBE total	3.59	14.28	25.12 ***
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	5.40	0.00 ****
Hispanic	11.75	5.94	
Asian	0.00	6.51	0.00 ****
Native American	0.00	0.03	0.00
Minority	11.75	17.88	65.72
Nonminority female	0.00	20.00	0.00 ****
M/WBE total	11.75	37.89	31.02 ****
Computer Systems Design and Related Services (NAICS 5415)			
African American	1.42	1.63	87.25
Hispanic	0.00	12.71	0.00 ****
Asian	0.81	2.94	27.43 *
Native American	0.00	0.16	0.00
Minority	2.23	17.43	12.77 ****
Nonminority female	16.05	9.09	
M/WBE total	18.28	26.53	68.90 *
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	3.68	0.00 ****
Hispanic	0.00	3.61	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.29	0.00 ****
Nonminority female	0.00	0.83	0.00 **
M/WBE total	0.00	8.12	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	0.76	0.00
Hispanic	0.21	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.21	0.76	27.67
Nonminority female	1.09	0.00	
M/WBE total	1.30	0.76	
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00 *
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Plastics Product Manufacturing (NAICS 3261)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	30.48	0.00 ****
M/WBE total	0.00	30.48	0.00 ****
Sawmills and Wood Preservation (NAICS 3211)			
African American	0.00	0.00	
Hispanic	100.00	14.29	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	14.29	
Nonminority female	0.00	0.00	
M/WBE total	100.00	14.29	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	65.29	5.65	
Hispanic	0.00	5.50	0.00 ****
Asian	0.00	1.17	0.00 ****
Native American	0.00	0.00	
Minority	65.29	12.32	
Nonminority female	1.31	22.83	5.72 ****
M/WBE total	66.59	35.15	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00 ****
M/WBE total	0.00	50.00	0.00 ****
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.73	0.00 ****
Hispanic	79.23	7.13	
Asian	0.00	3.38	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority	79.23	12.66	
Nonminority female	0.00	5.39	0.00 ****
M/WBE total	79.23	18.04	
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)			
African American	0.00	0.00	
Hispanic	96.36	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.36	0.00	
Nonminority female	0.78	0.00	
M/WBE total	97.14	0.00	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	1.81	23.39	7.74 ****
M/WBE total	1.81	37.90	4.77 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)			
African American	0.00	1.08	0.00
Hispanic	0.00	5.68	0.00
Asian	0.00	0.23	0.00
Native American	0.00	0.00	
Minority	0.00	6.99	0.00 ****
Nonminority female	0.00	45.76	0.00 ****
M/WBE total	0.00	52.75	0.00 ****
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 **
Hispanic	2.47	1.05	
Asian	0.00	13.53	0.00 ****
Native American	0.00	0.00	
Minority	2.47	15.77	15.65 ****
Nonminority female	26.77	5.04	
M/WBE total	29.24	20.81	
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	4.03	0.00 ****
Hispanic	0.00	4.70	0.00 ****
Asian	0.00	1.34	0.00
Native American	0.00	0.00	
Minority	0.00	10.08	0.00 ****
Nonminority female	4.64	24.33	19.07
M/WBE total	4.64	34.40	13.49 **
Office Supplies, Stationery, and Gift Stores (NAICS 4532)			
African American	0.00	1.56	0.00
Hispanic	0.00	7.81	0.00
Asian	0.00	0.00	
Native American	0.00	7.97	0.00
Minority	0.00	17.34	0.00 ****
Nonminority female	1.35	10.94	12.38
M/WBE total	1.35	28.28	4.79 ****
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	1.20	0.00
Hispanic	1.36	15.51	8.74 ***
Asian	0.00	0.38	0.00
Native American	0.00	1.52	0.00 ***
Minority	1.36	18.61	7.28 ****
Nonminority female	0.00	8.48	0.00 ****
M/WBE total	1.36	27.10	5.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 ****
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	1.16	3.12	37.20
Minority	1.16	6.25	18.60
Nonminority female	0.00	3.12	0.00 ****
M/WBE total	1.16	9.38	12.40 **
Direct Selling Establishments (NAICS 4543)			
African American	0.00	5.17	0.00 ****
Hispanic	0.00	6.10	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.27	0.00 ****
Nonminority female	40.24	34.59	
M/WBE total	40.24	45.86	87.74
Basic Chemical Manufacturing (NAICS 3251)			
African American	0.00	6.81	0.00 ****
Hispanic	40.42	3.41	
Asian	0.00	3.41	0.00 ****
Native American	0.00	0.00	
Minority	40.42	13.62	
Nonminority female	0.00	10.22	0.00 ****
M/WBE total	40.42	23.84	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	5.50	0.00 ****
Hispanic	0.00	11.40	0.00 ****
Asian	0.00	0.35	0.00
Native American	0.00	1.04	0.00
Minority	0.00	18.27	0.00 ****
Nonminority female	0.00	11.62	0.00 ****
M/WBE total	0.00	29.90	0.00 ****
Business Support Services (NAICS 5614)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00
Hispanic	30.35	6.25	
Asian	0.00	6.25	0.00
Native American	0.00	6.25	0.00
Minority	30.35	25.00	
Nonminority female	0.00	12.50	0.00
M/WBE total	30.35	37.50	80.92
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	4.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.67	0.00
Nonminority female	0.00	4.67	0.00
M/WBE total	0.00	9.34	0.00 ****
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	6.01	21.37	28.13 *
M/WBE total	6.01	21.37	28.13 *
Clothing Stores (NAICS 4481)			
African American	0.00	3.69	0.00 ****
Hispanic	0.00	28.00	0.00 ****
Asian	0.00	0.04	0.00
Native American	0.00	3.60	0.00 ****
Minority	0.00	35.34	0.00 ****
Nonminority female	2.11	24.96	8.44 ****
M/WBE total	2.11	60.29	3.50 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.28	0.00
Hispanic	0.00	3.64	0.00 ****
Asian	0.00	4.04	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.96	0.00 ****
Nonminority female	0.00	6.02	0.00 ****
M/WBE total	0.00	13.98	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00 ****
Asian	0.00	20.07	0.00 ****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00 ****
Nonminority female	32.99	1.09	
M/WBE total	32.99	41.56	79.38
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	2.16	0.00 ****
Hispanic	0.00	2.24	0.00 ****
Asian	0.00	0.73	0.00
Native American	0.00	0.16	0.00
Minority	0.00	5.29	0.00 ****
Nonminority female	28.24	7.79	
M/WBE total	28.24	13.09	
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	12.56	3.40	
Asian	0.00	0.24	0.00
Native American	0.00	1.99	0.00
Minority	12.56	5.63	
Nonminority female	0.00	15.37	0.00 ****
M/WBE total	12.56	21.01	59.82
Other Electrical Equipment and Component Manufacturing (NAICS 3359)			
African American	0.00	0.00	
Hispanic	0.00	10.89	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.89	0.00 ****
Nonminority female	3.33	24.22	13.76 *
M/WBE total	3.33	35.12	9.49 ***
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	6.80	0.00 ****
Hispanic	0.00	15.72	0.00 ****
Asian	0.00	0.46	0.00 *
Native American	0.00	0.22	0.00
Minority	0.00	23.21	0.00 ****
Nonminority female	29.56	7.96	
M/WBE total	29.56	31.16	94.85

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	1.09	0.00
Hispanic	0.00	1.09	0.00
Asian	0.00	12.42	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.60	0.00 ****
Nonminority female	0.00	40.06	0.00 ****
M/WBE total	0.00	54.66	0.00 ****
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	23.99	8.50	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	23.99	8.50	
Nonminority female	0.00	0.00	
M/WBE total	23.99	8.50	
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	2.34	0.00
Hispanic	0.00	6.47	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.81	0.00 ****
Nonminority female	0.00	4.30	0.00 **
M/WBE total	0.00	13.10	0.00 ****
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	9.65	0.00 ****
M/WBE total	0.00	12.71	0.00 ****
Residential Building Construction (NAICS 2361)			
African American	0.00	0.47	0.00
Hispanic	0.00	15.28	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	0.00	15.79	0.00 ****
Nonminority female	0.00	10.16	0.00 ****
M/WBE total	0.00	25.95	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	7.17	0.00 ****
Hispanic	0.00	5.23	0.00 ****
Asian	0.00	1.79	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.20	0.00 ****
Nonminority female	0.00	38.12	0.00 ****
M/WBE total	0.00	52.31	0.00 ****
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	1.47	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.47	0.00
Nonminority female	0.00	8.08	0.00 ****
M/WBE total	0.00	9.56	0.00 ****
General Freight Trucking (NAICS 4841)			
African American	0.00	11.44	0.00 ****
Hispanic	0.00	21.69	0.00 ****
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00 ***
Minority	0.00	36.81	0.00 ****
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	0.00	44.59	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	12.50	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Pharmaceutical and Medicine Manufacturing (NAICS 3254)			
African American	0.00	0.00	
Hispanic	0.00	9.26	0.00 ****
Asian	0.00	9.26	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.52	0.00 ****
Nonminority female	0.00	9.26	0.00 ****
M/WBE total	0.00	27.78	0.00 ****
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.09	0.00 ****
Nonminority female	0.00	9.09	0.00 ****
M/WBE total	0.00	18.18	0.00 ****
Other Miscellaneous Store Retailers (NAICS 4539)			
African American	0.00	0.44	0.00
Hispanic	0.00	0.43	0.00
Asian	0.00	0.00	
Native American	0.00	4.20	0.00 ****
Minority	0.00	5.07	0.00 ****
Nonminority female	3.20	11.57	27.69
M/WBE total	3.20	16.64	19.25
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.23	0.00 ****
Hispanic	36.29	18.97	
Asian	0.00	0.91	0.00 ****
Native American	0.00	0.64	0.00 **
Minority	36.29	21.75	
Nonminority female	28.01	13.30	
M/WBE total	64.29	35.05	
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00 ****
Nonminority female	0.00	16.67	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	0.00	0.00	
Native American	0.00	0.14	0.00
Minority	0.00	0.88	0.00
Nonminority female	4.76	5.29	90.13
M/WBE total	4.76	6.17	77.25
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	10.45	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	10.45	0.00	
Nonminority female	0.00	15.26	0.00 ****
M/WBE total	10.45	15.26	68.48

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	8.53	0.00 ****
Hispanic	0.00	23.05	0.00 ****
Asian	0.00	1.96	0.00
Native American	0.00	0.00	
Minority	0.00	33.55	0.00 ****
Nonminority female	79.63	14.69	
M/WBE total	79.63	48.24	
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00
Nonminority female	44.65	1.07	
M/WBE total	44.65	1.95	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	0.00	
Hispanic	0.00	4.97	0.00
Asian	0.00	0.00	
Native American	7.10	1.85	
Minority	7.10	6.82	
Nonminority female	0.00	8.67	0.00 ****
M/WBE total	7.10	15.50	45.82
Electric Power Generation, Transmission and Distribution (NAICS 2211)			
African American	0.00	0.00	
Hispanic	0.00	8.80	0.00 ****
Asian	0.00	4.00	0.00 ****
Native American	0.00	0.00	
Minority	0.00	12.80	0.00 ****
Nonminority female	0.00	14.80	0.00 ****
M/WBE total	0.00	27.60	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	6.38	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.38	0.00 ****
Nonminority female	0.00	17.02	0.00 ****
M/WBE total	0.00	23.40	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)			
African American	0.00	16.67	0.00 ****
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	33.33	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	33.33	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ****
Asian	0.00	9.49	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	0.00	4.74	0.00 ***
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.74	0.00 ***
Nonminority female	0.00	8.45	0.00 ****
M/WBE total	0.00	13.19	0.00 ****
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Shoe Stores (NAICS 4482)			
African American	0.00	7.66	0.00
Hispanic	0.00	0.00	
Asian	0.00	6.17	0.00
Native American	0.00	0.00	
Minority	0.00	13.83	0.00 ****
Nonminority female	0.00	9.15	0.00
M/WBE total	0.00	22.99	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	10.15	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	7.28	0.00
Native American	0.00	0.00	
Minority	0.00	17.44	0.00 ****
Nonminority female	0.00	2.87	0.00
M/WBE total	0.00	20.31	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.00	
Hispanic	0.00	7.57	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	8.09	0.00
Nonminority female	0.00	15.66	0.00 ****
M/WBE total	0.00	23.75	0.00 ****
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)			
African American	0.00	8.33	0.00
Hispanic	0.00	16.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	16.67	0.00
M/WBE total	0.00	41.67	0.00 ****
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	6.12	0.00 ****
M/WBE total	0.00	9.18	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle Manufacturing (NAICS 3361)			
African American	0.00	0.00	
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	0.34	0.00
Hispanic	0.00	1.28	0.00 ****
Asian	0.00	0.38	0.00
Native American	8.86	0.05	
Minority	8.86	2.05	
Nonminority female	17.71	3.59	
M/WBE total	26.57	5.64	
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.00	0.90	0.00
Hispanic	0.00	3.80	0.00
Asian	0.00	2.35	0.00
Native American	0.00	0.00	
Minority	0.00	7.06	0.00 ***
Nonminority female	0.00	16.89	0.00 ****
M/WBE total	0.00	23.95	0.00 ****
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00 ****
Hispanic	0.00	6.86	0.00 ****
Asian	0.00	1.60	0.00
Native American	0.00	0.00	
Minority	0.00	13.38	0.00 ****
Nonminority female	0.00	19.01	0.00 ****
M/WBE total	0.00	32.39	0.00 ****
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	28.57	0.00 ****
Native American	0.00	0.00	
Minority	0.00	28.57	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	28.57	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Electronic and Precision Equipment Repair and Maintenance (NAICS 8112)			
African American	0.00	0.00	
Hispanic	0.00	2.99	0.00
Asian	86.49	1.49	
Native American	0.00	1.49	0.00
Minority	86.49	5.97	
Nonminority female	0.00	10.15	0.00 ****
M/WBE total	86.49	16.12	
Legal Services (NAICS 5411)			
African American	0.00	0.00	
Hispanic	0.00	1.75	0.00 **
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.75	0.00 **
Nonminority female	0.00	8.04	0.00 ****
M/WBE total	0.00	9.80	0.00 ****
Forging and Stamping (NAICS 3321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00
Native American	0.00	0.00	
Minority	0.00	11.11	0.00
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	22.22	0.00 ****
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00
Hispanic	0.00	18.93	0.00 ****
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	0.00	19.53	0.00 ****
Nonminority female	82.78	7.22	
M/WBE total	82.78	26.75	
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	35.88	20.61	
M/WBE total	35.88	65.75	54.56

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	19.96	0.00 ****
M/WBE total	0.00	19.96	0.00 ****
Ship and Boat Building (NAICS 3366)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	16.67	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Book Stores and News Dealers (NAICS 4512)			
African American	0.00	0.00	
Hispanic	0.00	0.88	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.88	0.00
Nonminority female	0.00	4.42	0.00
M/WBE total	0.00	5.31	0.00
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.10	0.00
Hispanic	0.00	1.01	0.00
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	1.22	0.00
Nonminority female	0.00	27.22	0.00 ****
M/WBE total	0.00	28.44	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	0.00	
Hispanic	0.00	14.29	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.29	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	14.29	0.00 ****
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Other Motor Vehicle Dealers (NAICS 4412)			
African American	0.00	0.56	0.00
Hispanic	0.00	0.56	0.00
Asian	0.00	24.16	0.00 ****
Native American	0.00	0.00	
Minority	0.00	25.28	0.00 ****
Nonminority female	77.23	12.08	
M/WBE total	77.23	37.36	
Specialized Design Services (NAICS 5414)			
African American	0.00	1.50	0.00
Hispanic	0.00	3.18	0.00 **
Asian	0.00	1.78	0.00
Native American	0.00	0.00	
Minority	0.00	6.46	0.00 **
Nonminority female	0.00	17.99	0.00 ****
M/WBE total	0.00	24.46	0.00 ****
Building Finishing Contractors (NAICS 2383)			
African American	0.00	0.00	
Hispanic	22.68	22.80	99.47
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	22.68	26.25	86.39
Nonminority female	0.00	9.83	0.00 ****
M/WBE total	22.68	36.08	62.86

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Support Activities for Mining (NAICS 2131)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	2.53	0.00
M/WBE total	0.00	2.53	0.00
Natural Gas Distribution (NAICS 2212)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00

Source and Notes: *See Table 6.8.*

Table AD.24. Industry Group Utilization, Availability, and Disparity Results for City of Austin Commodities Contracting—Contracts without M/WBE Goals (Dollars Paid)

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (NAICS 4236)			
African American	0.05	0.02	
Hispanic	3.58	6.59	54.40
Asian	0.00	5.63	0.00 ****
Native American	0.00	0.93	0.00 ****
Minority	3.63	13.17	27.60 **
Nonminority female	1.70	9.21	18.48 ***
M/WBE total	5.34	22.38	23.85 ****
Petroleum and Petroleum Products Merchant Wholesalers (NAICS 4247)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	16.56	0.00 ***
M/WBE total	0.00	16.56	0.00 ***
Utility System Construction (NAICS 2371)			
African American	0.00	0.00	
Hispanic	0.66	7.79	8.53 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.66	7.79	8.53 ****
Nonminority female	0.00	12.07	0.00 ****
M/WBE total	0.66	19.86	3.34 ****
Machinery, Equipment, and Supplies Merchant Wholesalers (NAICS 4238)			
African American	0.00	1.55	0.00 ****
Hispanic	0.09	9.51	0.98 ****
Asian	0.00	2.40	0.00 ****
Native American	1.59	2.93	54.24
Minority	1.68	16.39	10.28 ****
Nonminority female	0.76	15.59	4.85 ****
M/WBE total	2.44	31.98	7.63 ****
Automobile Dealers (NAICS 4411)			
African American	0.00	3.83	0.00 ****
Hispanic	7.63	12.27	62.14
Asian	0.00	1.91	0.00 ****
Native American	0.00	0.00	
Minority	7.63	18.01	42.33 ***
Nonminority female	0.00	4.61	0.00 ****
M/WBE total	7.63	22.63	33.70 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (NAICS 4231)			
African American	0.00	0.74	0.00
Hispanic	0.13	20.01	0.65 ****
Asian	0.00	0.19	0.00
Native American	0.00	0.37	0.00
Minority	0.13	21.31	0.61 ****
Nonminority female	0.00	8.75	0.00 ****
M/WBE total	0.13	30.06	0.43 ****
Professional and Commercial Equipment and Supplies Merchant Wholesalers (NAICS 4234)			
African American	0.00	4.95	0.00 ****
Hispanic	13.36	8.88	
Asian	7.07	4.05	
Native American	1.15	2.33	49.35
Minority	21.58	20.21	
Nonminority female	24.70	11.13	
M/WBE total	46.28	31.35	
Nonresidential Building Construction (NAICS 2362)			
African American	0.00	1.81	0.00 ****
Hispanic	0.00	7.54	0.00 ****
Asian	0.00	0.73	0.00 *
Native American	0.00	0.63	0.00 *
Minority	0.00	10.70	0.00 ****
Nonminority female	0.00	11.55	0.00 ****
M/WBE total	0.00	22.25	0.00 ****
Engine, Turbine, and Power Transmission Equipment Manufacturing (NAICS 3336)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (NAICS 3345)			
African American	0.00	0.00	
Hispanic	0.00	0.34	0.00
Asian	0.00	5.74	0.00 ****
Native American	0.00	0.00	
Minority	0.00	6.07	0.00 ****
Nonminority female	1.06	4.05	26.28
M/WBE total	1.06	10.12	10.51 **

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Building Equipment Contractors (NAICS 2382)			
African American	0.00	0.54	0.00 ****
Hispanic	0.82	5.24	15.59 ***
Asian	0.00	2.24	0.00 ****
Native American	0.00	0.05	0.00
Minority	0.82	8.07	10.13 ****
Nonminority female	2.97	6.14	48.34
M/WBE total	3.78	14.21	26.63 ***
Management, Scientific, and Technical Consulting Services (NAICS 5416)			
African American	0.00	5.38	0.00 ****
Hispanic	12.10	5.94	
Asian	0.00	6.49	0.00 ****
Native American	0.00	0.03	0.00
Minority	12.10	17.84	67.85
Nonminority female	0.00	20.03	0.00 ****
M/WBE total	12.10	37.87	31.96 ****
Computer and Peripheral Equipment Manufacturing (NAICS 3341)			
African American	0.00	3.70	0.00 ****
Hispanic	0.00	3.59	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.29	0.00 ****
Nonminority female	0.00	0.82	0.00 ***
M/WBE total	0.00	8.11	0.00 ****
Highway, Street, and Bridge Construction (NAICS 2373)			
African American	0.00	3.26	0.00 ****
Hispanic	0.00	11.88	0.00 ****
Asian	0.00	2.04	0.00 ****
Native American	0.00	0.68	0.00
Minority	0.00	17.86	0.00 ****
Nonminority female	0.00	14.68	0.00 ****
M/WBE total	0.00	32.54	0.00 ****
Electrical Equipment Manufacturing (NAICS 3353)			
African American	0.00	0.91	0.00
Hispanic	0.25	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.25	0.91	27.67
Nonminority female	1.29	0.00	
M/WBE total	1.54	0.91	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Communications Equipment Manufacturing (NAICS 3342)			
African American	0.00	0.00	
Hispanic	0.36	5.19	6.94
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.36	5.19	6.94
Nonminority female	0.00	24.66	0.00 ****
M/WBE total	0.36	29.85	1.21 ****
Petroleum and Coal Products Manufacturing (NAICS 3241)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Furniture and Home Furnishing Merchant Wholesalers (NAICS 4232)			
African American	66.24	5.65	
Hispanic	0.00	5.50	0.00 ****
Asian	0.00	1.17	0.00 *
Native American	0.00	0.00	
Minority	66.24	12.32	
Nonminority female	1.37	22.82	6.01 ****
M/WBE total	67.62	35.14	
Computer Systems Design and Related Services (NAICS 5415)			
African American	2.39	1.60	
Hispanic	0.00	11.23	0.00 ****
Asian	0.00	2.98	0.00 ****
Native American	0.00	0.18	0.00
Minority	2.39	15.99	14.94 ****
Nonminority female	26.49	10.05	
M/WBE total	28.88	26.04	
Lime and Gypsum Product Manufacturing (NAICS 3274)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	50.00	0.00 ****
M/WBE total	0.00	50.00	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Plastics Product Manufacturing (NAICS 3261)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	30.48	0.00 ****
M/WBE total	0.00	30.48	0.00 ****
Sawmills and Wood Preservation (NAICS 3211)			
African American	0.00	0.00	
Hispanic	100.00	14.29	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	100.00	14.29	
Nonminority female	0.00	0.00	
M/WBE total	100.00	14.29	
Chemical and Allied Products Merchant Wholesalers (NAICS 4246)			
African American	0.00	3.23	0.00 ****
Hispanic	0.00	9.68	0.00 ****
Asian	0.00	1.61	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.52	0.00 ****
Nonminority female	1.73	23.39	7.39 ****
M/WBE total	1.73	37.90	4.56 ****
Miscellaneous Nondurable Goods Merchant Wholesalers (NAICS 4249)			
African American	0.00	1.11	0.00
Hispanic	0.00	5.83	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.94	0.00 ****
Nonminority female	0.00	46.39	0.00 ****
M/WBE total	0.00	53.33	0.00 ****
Motor Vehicle Body and Trailer Manufacturing (NAICS 3362)			
African American	0.00	0.00	
Hispanic	96.37	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	96.37	0.00	
Nonminority female	0.00	0.00	
M/WBE total	96.37	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Architectural, Engineering, and Related Services (NAICS 5413)			
African American	0.00	1.73	0.00 ****
Hispanic	91.71	7.13	
Asian	0.00	3.38	0.00 ****
Native American	0.00	0.42	0.00 ****
Minority	91.71	12.66	
Nonminority female	0.00	5.39	0.00 ****
M/WBE total	91.71	18.04	
Software Publishers (NAICS 5112)			
African American	0.00	1.19	0.00 ***
Hispanic	2.52	1.05	
Asian	0.00	13.53	0.00 ****
Native American	0.00	0.00	
Minority	2.52	15.77	15.98 ****
Nonminority female	25.89	5.04	
M/WBE total	28.41	20.81	
Paper and Paper Product Merchant Wholesalers (NAICS 4241)			
African American	0.00	4.37	0.00 ****
Hispanic	0.00	4.74	0.00 ****
Asian	0.00	1.46	0.00
Native American	0.00	0.00	
Minority	0.00	10.57	0.00 ****
Nonminority female	6.53	24.85	26.26
M/WBE total	6.53	35.42	18.43 **
Office Supplies, Stationery, and Gift Stores (NAICS 4532)			
African American	0.00	1.56	0.00
Hispanic	0.00	7.81	0.00
Asian	0.00	0.00	
Native American	0.00	7.97	0.00
Minority	0.00	17.34	0.00 ****
Nonminority female	1.39	10.94	12.69
M/WBE total	1.39	28.28	4.91 *
Other Telecommunications (NAICS 5179)			
African American	0.00	2.08	0.00 **
Hispanic	0.00	1.04	0.00
Asian	0.00	0.00	
Native American	1.30	3.12	41.50
Minority	1.30	6.25	20.75
Nonminority female	0.00	3.12	0.00 **
M/WBE total	1.30	9.38	13.83

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lumber and Other Construction Materials Merchant Wholesalers (NAICS 4233)			
African American	0.00	0.85	0.00 **
Hispanic	1.42	13.72	10.34 ***
Asian	0.00	0.46	0.00 **
Native American	0.00	1.82	0.00 ****
Minority	1.42	16.84	8.42 ****
Nonminority female	0.00	9.18	0.00 ****
M/WBE total	1.42	26.02	5.45 ****
Basic Chemical Manufacturing (NAICS 3251)			
African American	0.00	6.77	0.00 *
Hispanic	36.85	3.38	
Asian	0.00	3.38	0.00 *
Native American	0.00	0.00	
Minority	36.85	13.54	
Nonminority female	0.00	10.15	0.00 ****
M/WBE total	36.85	23.69	
Automotive Parts, Accessories, and Tire Stores (NAICS 4413)			
African American	0.00	5.49	0.00 ****
Hispanic	0.00	11.43	0.00 ****
Asian	0.00	0.34	0.00
Native American	0.00	1.03	0.00
Minority	0.00	18.30	0.00 ****
Nonminority female	0.00	11.62	0.00 ****
M/WBE total	0.00	29.92	0.00 ****
Business Support Services (NAICS 5614)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Direct Selling Establishments (NAICS 4543)			
African American	0.00	5.63	0.00 ****
Hispanic	0.00	6.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	11.96	0.00 ****
Nonminority female	45.27	36.79	
M/WBE total	45.27	48.76	92.85

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
General Freight Trucking (NAICS 4841)			
African American	0.00	11.44	0.00 ****
Hispanic	0.00	21.69	0.00 ****
Asian	0.00	0.34	0.00
Native American	0.00	3.34	0.00 ****
Minority	0.00	36.81	0.00 ****
Nonminority female	0.00	7.78	0.00 ****
M/WBE total	0.00	44.59	0.00 ****
Other Chemical Product and Preparation Manufacturing (NAICS 3259)			
African American	0.00	6.25	0.00 ****
Hispanic	28.69	6.25	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	28.69	25.00	
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	28.69	37.50	76.51
Aerospace Product and Parts Manufacturing (NAICS 3364)			
African American	0.00	0.00	
Hispanic	0.00	4.65	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	4.65	0.00
Nonminority female	0.00	4.65	0.00
M/WBE total	0.00	9.30	0.00 ****
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (NAICS 4237)			
African American	0.00	0.24	0.00
Hispanic	0.00	3.73	0.00 ****
Asian	0.00	4.27	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.25	0.00 ****
Nonminority female	0.00	5.34	0.00 ****
M/WBE total	0.00	13.59	0.00 ****
Other Financial Investment Activities (NAICS 5239)			
African American	0.00	0.36	0.00
Hispanic	0.00	20.03	0.00 ****
Asian	0.00	20.07	0.00 ****
Native American	0.00	0.00	
Minority	0.00	40.47	0.00 ****
Nonminority female	32.84	1.09	
M/WBE total	32.84	41.56	79.02

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other General Purpose Machinery Manufacturing (NAICS 3339)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	7.45	16.76	44.45
M/WBE total	7.45	16.76	44.45
Clothing Stores (NAICS 4481)			
African American	0.00	3.63	0.00 ****
Hispanic	0.00	27.23	0.00 ****
Asian	0.00	0.05	0.00
Native American	0.00	3.50	0.00 ****
Minority	0.00	34.41	0.00 ****
Nonminority female	2.60	26.97	9.64 ****
M/WBE total	2.60	61.38	4.24 ****
Automotive Repair and Maintenance (NAICS 8111)			
African American	0.00	2.37	0.00 ****
Hispanic	0.00	2.36	0.00 ****
Asian	0.00	0.77	0.00
Native American	0.00	0.15	0.00
Minority	0.00	5.64	0.00 ****
Nonminority female	31.25	8.52	
M/WBE total	31.25	14.16	
Other Electrical Equipment and Component Manufacturing (NAICS 3359)			
African American	0.00	0.00	
Hispanic	0.00	10.89	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	10.89	0.00 ****
Nonminority female	3.33	24.22	13.76 *
M/WBE total	3.33	35.12	9.49 ***
Miscellaneous Durable Goods Merchant Wholesalers (NAICS 4239)			
African American	0.00	0.00	
Hispanic	12.86	3.44	
Asian	0.00	0.23	0.00
Native American	0.00	2.04	0.00
Minority	12.86	5.71	
Nonminority female	0.00	15.37	0.00 ****
M/WBE total	12.86	21.08	61.03

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Specialty Trade Contractors (NAICS 2389)			
African American	0.00	6.80	0.00 ****
Hispanic	0.00	15.72	0.00 ****
Asian	0.00	0.46	0.00 **
Native American	0.00	0.22	0.00
Minority	0.00	23.21	0.00 ****
Nonminority female	29.06	7.96	
M/WBE total	29.06	31.16	93.24
Medical Equipment and Supplies Manufacturing (NAICS 3391)			
African American	0.00	0.00	
Hispanic	0.00	3.48	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.48	0.00
Nonminority female	0.00	9.72	0.00 ****
M/WBE total	0.00	13.20	0.00 ****
Cement and Concrete Product Manufacturing (NAICS 3273)			
African American	0.00	0.00	
Hispanic	24.28	8.57	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	24.28	8.57	
Nonminority female	0.00	0.00	
M/WBE total	24.28	8.57	
Electronic Shopping and Mail-Order Houses (NAICS 4541)			
African American	0.00	1.09	0.00
Hispanic	0.00	1.09	0.00
Asian	0.00	12.42	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.60	0.00 ****
Nonminority female	0.00	40.06	0.00 ****
M/WBE total	0.00	54.66	0.00 ****
Building Material and Supplies Dealers (NAICS 4441)			
African American	0.00	2.34	0.00 *
Hispanic	0.00	6.47	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.81	0.00 ****
Nonminority female	0.00	4.30	0.00 ****
M/WBE total	0.00	13.11	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Individual and Family Services (NAICS 6241)			
African American	0.00	7.17	0.00 ****
Hispanic	0.00	5.23	0.00 ****
Asian	0.00	1.79	0.00 ****
Native American	0.00	0.00	
Minority	0.00	14.20	0.00 ****
Nonminority female	0.00	38.12	0.00 ****
M/WBE total	0.00	52.31	0.00 ****
Residential Building Construction (NAICS 2361)			
African American	0.00	0.47	0.00 ***
Hispanic	0.00	15.28	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.04	0.00
Minority	0.00	15.79	0.00 ****
Nonminority female	0.00	10.16	0.00 ****
M/WBE total	0.00	25.95	0.00 ****
Metal and Mineral (except Petroleum) Merchant Wholesalers (NAICS 4235)			
African American	0.00	0.00	
Hispanic	0.00	5.80	0.00 ****
Asian	0.00	10.94	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.74	0.00 ****
Nonminority female	0.00	11.15	0.00 ****
M/WBE total	0.00	27.89	0.00 ****
Waste Treatment and Disposal (NAICS 5622)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	6.25	0.00 ****
Native American	0.00	6.25	0.00 ****
Minority	0.00	12.50	0.00 ****
Nonminority female	0.00	12.50	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Other Fabricated Metal Product Manufacturing (NAICS 3329)			
African American	0.00	0.00	
Hispanic	6.78	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	6.78	0.00	
Nonminority female	0.00	17.05	0.00 ****
M/WBE total	6.78	17.05	39.75

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Pharmaceutical and Medicine Manufacturing (NAICS 3254)			
African American	0.00	0.00	
Hispanic	0.00	9.35	0.00 ****
Asian	0.00	9.35	0.00 ****
Native American	0.00	0.00	
Minority	0.00	18.71	0.00 ****
Nonminority female	0.00	9.35	0.00 ****
M/WBE total	0.00	28.06	0.00 ****
Other Miscellaneous Store Retailers (NAICS 4539)			
African American	0.00	0.45	0.00
Hispanic	0.00	0.44	0.00
Asian	0.00	0.00	
Native American	0.00	4.05	0.00
Minority	0.00	4.94	0.00 ****
Nonminority female	3.29	11.29	29.11
M/WBE total	3.29	16.24	20.25
Rubber Product Manufacturing (NAICS 3262)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (NAICS 3334)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (NAICS 3371)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)			
African American	0.00	0.00	
Hispanic	0.00	9.09	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	9.09	0.00
Nonminority female	0.00	9.09	0.00
M/WBE total	0.00	18.18	0.00 ****
Paint, Coating, and Adhesive Manufacturing (NAICS 3255)			
African American	0.00	0.00	
Hispanic	0.00	8.33	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	8.33	0.00 ****
Nonminority female	0.00	16.67	0.00 ****
M/WBE total	0.00	25.00	0.00 ****
Foundation, Structure, and Building Exterior Contractors (NAICS 2381)			
African American	0.00	1.25	0.00 ****
Hispanic	38.36	18.91	
Asian	0.00	0.95	0.00 ***
Native American	0.00	0.63	0.00
Minority	38.36	21.73	
Nonminority female	30.68	13.24	
M/WBE total	69.04	34.97	
Electronics and Appliance Stores (NAICS 4431)			
African American	0.00	0.00	
Hispanic	0.00	0.74	0.00
Asian	0.00	0.00	
Native American	0.00	0.14	0.00
Minority	0.00	0.88	0.00
Nonminority female	4.87	5.29	92.10
M/WBE total	4.87	6.17	78.95
Personal and Household Goods Repair and Maintenance (NAICS 8114)			
African American	0.00	8.51	0.00 ****
Hispanic	0.00	22.98	0.00 ****
Asian	0.00	1.95	0.00
Native American	0.00	0.00	
Minority	0.00	33.44	0.00 ****
Nonminority female	79.34	14.67	
M/WBE total	79.34	48.11	

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Other Support Services (NAICS 5619)			
African American	0.00	0.27	0.00
Hispanic	0.00	0.36	0.00
Asian	0.00	0.25	0.00
Native American	0.00	0.01	0.00
Minority	0.00	0.88	0.00
Nonminority female	40.78	1.07	
M/WBE total	40.78	1.95	
Other Miscellaneous Manufacturing (NAICS 3399)			
African American	0.00	0.00	
Hispanic	0.00	4.97	0.00 *
Asian	0.00	0.00	
Native American	7.73	1.85	
Minority	7.73	6.82	
Nonminority female	0.00	8.67	0.00 ****
M/WBE total	7.73	15.50	49.90
Office Furniture (including Fixtures) Manufacturing (NAICS 3372)			
African American	0.00	16.67	0.00 ****
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	33.33	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	33.33	0.00 ****
Remediation and Other Waste Management Services (NAICS 5629)			
African American	0.00	0.00	
Hispanic	0.00	6.38	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	6.38	0.00 ****
Nonminority female	0.00	17.02	0.00 ****
M/WBE total	0.00	23.40	0.00 ****
Commercial and Service Industry Machinery Manufacturing (NAICS 3333)			
African American	0.00	0.00	
Hispanic	0.00	9.49	0.00 ***
Asian	0.00	9.49	0.00 ***
Native American	0.00	0.00	
Minority	0.00	18.97	0.00 ****
Nonminority female	0.00	18.97	0.00 ****
M/WBE total	0.00	37.94	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Commercial and Industrial Machinery and Equipment Rental and Leasing (NAICS 5324)			
African American	0.00	0.00	
Hispanic	0.00	5.48	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	5.48	0.00 ****
Nonminority female	0.00	9.78	0.00 ****
M/WBE total	0.00	15.27	0.00 ****
Steel Product Manufacturing from Purchased Steel (NAICS 3312)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Electric Lighting Equipment Manufacturing (NAICS 3351)			
African American	0.00	10.15	0.00 ****
Hispanic	0.00	0.00	
Asian	0.00	7.28	0.00
Native American	0.00	0.00	
Minority	0.00	17.44	0.00 ****
Nonminority female	0.00	2.87	0.00
M/WBE total	0.00	20.31	0.00 ****
Depository Credit Intermediation (NAICS 5221)			
African American	0.00	0.00	
Hispanic	0.00	7.57	0.00
Asian	0.00	0.51	0.00
Native American	0.00	0.00	
Minority	0.00	8.09	0.00
Nonminority female	0.00	15.66	0.00 ****
M/WBE total	0.00	23.75	0.00 ****
Shoe Stores (NAICS 4482)			
African American	0.00	7.66	0.00
Hispanic	0.00	0.00	
Asian	0.00	6.17	0.00
Native American	0.00	0.00	
Minority	0.00	13.83	0.00 ****
Nonminority female	0.00	9.15	0.00
M/WBE total	0.00	22.99	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Metalworking Machinery Manufacturing (NAICS 3335)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Apparel Accessories and Other Apparel Manufacturing (NAICS 3159)			
African American	0.00	8.33	0.00
Hispanic	0.00	16.67	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	25.00	0.00 ****
Nonminority female	0.00	16.67	0.00
M/WBE total	0.00	41.67	0.00 ****
Other Professional, Scientific, and Technical Services (NAICS 5419)			
African American	0.00	0.34	0.00
Hispanic	0.00	1.28	0.00
Asian	0.00	0.38	0.00
Native American	8.46	0.05	
Minority	8.46	2.05	
Nonminority female	15.60	3.59	
M/WBE total	24.07	5.64	
Nonmetallic Mineral Mining and Quarrying (NAICS 2123)			
African American	0.00	0.00	
Hispanic	0.00	3.06	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.06	0.00
Nonminority female	0.00	6.12	0.00 ****
M/WBE total	0.00	9.18	0.00 ****
Motor Vehicle Manufacturing (NAICS 3361)			
African American	0.00	0.00	
Hispanic	0.00	16.67	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412)			
African American	0.00	0.90	0.00
Hispanic	0.00	3.80	0.00 ****
Asian	0.00	2.35	0.00 ****
Native American	0.00	0.00	
Minority	0.00	7.06	0.00 ****
Nonminority female	0.00	16.89	0.00 ****
M/WBE total	0.00	23.95	0.00 ****
Agencies, Brokerages, and Other Insurance Related Activities (NAICS 5242)			
African American	0.00	4.92	0.00 ****
Hispanic	0.00	6.86	0.00 ****
Asian	0.00	1.60	0.00
Native American	0.00	0.00	
Minority	0.00	13.38	0.00 ****
Nonminority female	0.00	19.01	0.00 ****
M/WBE total	0.00	32.39	0.00 ****
Semiconductor and Other Electronic Component Manufacturing (NAICS 3344)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	28.57	0.00
Native American	0.00	0.00	
Minority	0.00	28.57	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	28.57	0.00
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 4242)			
African American	0.00	14.80	0.00 ****
Hispanic	0.00	17.12	0.00 ****
Asian	0.00	13.21	0.00 ****
Native American	0.00	0.00	
Minority	0.00	45.14	0.00 ****
Nonminority female	45.00	20.61	
M/WBE total	45.00	65.75	68.44
Legal Services (NAICS 5411)			
African American	0.00	0.00	
Hispanic	0.00	1.75	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.75	0.00 ****
Nonminority female	0.00	8.04	0.00 ****
M/WBE total	0.00	9.80	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Forging and Stamping (NAICS 3321)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	11.11	0.00
Native American	0.00	0.00	
Minority	0.00	11.11	0.00
Nonminority female	0.00	11.11	0.00
M/WBE total	0.00	22.22	0.00 ****
Water, Sewage and Other Systems (NAICS 2213)			
African American	0.00	0.92	0.00
Hispanic	0.00	0.00	
Asian	0.00	7.95	0.00 ****
Native American	0.00	0.00	
Minority	0.00	8.87	0.00 ****
Nonminority female	0.00	2.75	0.00
M/WBE total	0.00	11.62	0.00 ****
Services to Buildings and Dwellings (NAICS 5617)			
African American	0.00	0.30	0.00
Hispanic	0.00	18.93	0.00 ****
Asian	0.00	0.15	0.00
Native American	0.00	0.15	0.00
Minority	0.00	19.53	0.00 ****
Nonminority female	82.73	7.22	
M/WBE total	82.73	26.75	
Scientific Research and Development Services (NAICS 5417)			
African American	0.00	0.50	0.00
Hispanic	0.00	1.49	0.00
Asian	0.00	1.00	0.00
Native American	0.00	0.00	
Minority	0.00	2.99	0.00
Nonminority female	0.00	22.84	0.00 ****
M/WBE total	0.00	25.83	0.00 ****
Agriculture, Construction, and Mining Machinery Manufacturing (NAICS 3331)			
African American	0.00	7.69	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	7.69	0.00
Nonminority female	0.00	0.00	
M/WBE total	0.00	7.69	0.00

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Ship and Boat Building (NAICS 3366)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	16.67	0.00 ****
Native American	0.00	0.00	
Minority	0.00	16.67	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	16.67	0.00 ****
Apparel, Piece Goods, and Notions Merchant Wholesalers (NAICS 4243)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	19.96	0.00 ****
M/WBE total	0.00	19.96	0.00 ****
Book Stores and News Dealers (NAICS 4512)			
African American	0.00	0.00	
Hispanic	0.00	0.88	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.88	0.00
Nonminority female	0.00	4.42	0.00
M/WBE total	0.00	5.31	0.00
Lessors of Real Estate (NAICS 5311)			
African American	0.00	0.10	0.00
Hispanic	0.00	1.01	0.00
Asian	0.00	0.10	0.00
Native American	0.00	0.00	
Minority	0.00	1.22	0.00
Nonminority female	0.00	27.22	0.00 ****
M/WBE total	0.00	28.44	0.00 ****
Architectural and Structural Metals Manufacturing (NAICS 3323)			
African American	0.00	0.00	
Hispanic	0.00	14.29	0.00 ****
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	14.29	0.00 ****
Nonminority female	0.00	0.00	
M/WBE total	0.00	14.29	0.00 ****

Appendix D. Detailed Utilization, Availability & Disparity Tables

NAICS Industry Group & M/WBE Type	Utilization (%)	Availability (%)	Disparity Ratio
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (NAICS 3256)			
African American	0.00	0.00	
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	0.00	
Nonminority female	0.00	0.00	
M/WBE total	0.00	0.00	
Support Activities for Air Transportation (NAICS 4881)			
African American	0.00	1.27	0.00
Hispanic	0.00	0.00	
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	1.27	0.00
Nonminority female	0.00	13.16	0.00 ****
M/WBE total	0.00	14.43	0.00 ****
Specialized Design Services (NAICS 5414)			
African American	0.00	1.50	0.00
Hispanic	0.00	3.18	0.00
Asian	0.00	1.78	0.00
Native American	0.00	0.00	
Minority	0.00	6.46	0.00
Nonminority female	0.00	17.99	0.00 ****
M/WBE total	0.00	24.46	0.00 ****
Building Finishing Contractors (NAICS 2383)			
African American	0.00	0.00	
Hispanic	22.68	22.80	99.47
Asian	0.00	3.45	0.00 ****
Native American	0.00	0.00	
Minority	22.68	26.25	86.39
Nonminority female	0.00	9.83	0.00 ****
M/WBE total	22.68	36.08	62.86 *
Natural Gas Distribution (NAICS 2212)			
African American	0.00	0.00	
Hispanic	0.00	3.57	0.00
Asian	0.00	0.00	
Native American	0.00	0.00	
Minority	0.00	3.57	0.00
Nonminority female	0.00	7.14	0.00
M/WBE total	0.00	10.71	0.00

Source and Notes: See Table 6.8.



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