

Central Health Disparity Study 2022



CENTRAL HEALTH



CENTRAL HEALTH DISPARITY STUDY

2022

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About the Study Team

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

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I. EXECUTIVE SUMMARY

Colette Holt & Associates (“CHA”) was retained by Travis County Healthcare District (“Central Health”) to perform a disparity study in conformance with strict constitutional scrutiny. In this Study, we determined Central Health’s utilization of M/WBEs during fiscal years 2013 through 2019; the availability of these firms as a percentage of all firms in Central Health’s geographic and industry market areas; and any disparities between Central Health’s utilization of M/WBEs and M/WBE availability. We further analyzed disparities in the Austin Metropolitan Area and the wider Texas economy, where contracting affirmative action is rarely practiced, to evaluate whether barriers continue to impede opportunities for minorities and women when remedial intervention is not imposed. We also gathered qualitative data about the experiences of M/WBEs in obtaining Central Health contracts and associated subcontracts. Based on these findings, we evaluated whether the use of race- and gender-conscious measures is supported by the results of this analysis.

The methodology for this Study embodies the constitutional principles of *City of Richmond v. J.A. Croson Co.*,¹ *Adarand Constructors, Inc. v. Peña*,² Fifth Circuit Court of Appeals case law, the DBE program regulations and best practices for designing race- and gender-conscious programs. The CHA approach has been specifically upheld by the federal courts. It is also the approach developed by Ms. Holt for the National Academy of Sciences that is now the recommended standard for designing legally defensible disparity studies.

A. Summary of Strict Constitutional Standards Applicable to M/WBE Programs

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

Strict scrutiny analysis has two prongs:

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

1. 488 U.S. 469 (1989).

2. 515 U.S. 200 (1995).

2. Any remedies adopted must be “narrowly tailored” to that discrimination; the program must be directed at the types and depth of discrimination identified.³

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

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

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

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

The DBE program for United States Department of Transportation funded contracts has been evaluated under a similar framework. The program regulations were first revised in 1999 to meet the new test imposed by the U.S. Supreme Court in *Adarand Constructors, Inc. v. Peña*.⁴

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

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

4. 515 U.S. 200 (1995).

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

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

B. Contract Data Analyses of Central Health’s Contracts

The Study examined contract data for Fiscal Years 2013 through 2019 for Central Health. In order to conduct the analysis, we constructed all the fields necessary for our analysis where they were missing in the agency’s contract records (*e.g.*, industry type; zip codes; six-digit North American Industry Classification System (“NAICS”) codes of prime contractors and subcontractors; Minority- and Woman-owned Business Enterprise (“M/WBE”). This work resulted in the Final Contract Data File (“FCDF”). Tables 1-1 and 1-2 provide data on the FCDF.

Table 1-1: Final Contract Data File

Contract Type	Total Contracts	Share of Total Contracts
Prime Contracts	103	56.6%
Subcontracts	79	43.4%
TOTAL	182	100.0%

Source: CHA analysis of Central Health data

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

Business Type	Total Contract Dollars	Share of Total Contract Dollars
Prime Contracts	\$30,959,298	68.0%
Subcontracts	\$14,550,222	32.0%
TOTAL	\$45,509,520	100.0%

Source: CHA analysis of Central Health data

Table 1-3 presents data on the 55 NAICS codes contained in the FCDF. These codes contain a total contract dollar value of \$45,509,520. The third column represents the share of all contracts to firms performing work in a particular NAICS code. The fourth column presents the cumulative share of Central Health’s spending from the NAICS code, from the largest share of the NAICS codes to the smallest share.

Table 1-3: Industry Percentage Distribution of Central Health’s Contracts by Dollars

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
238220	Plumbing, Heating, and Air-Conditioning Contractors	10.9%	10.9%
541110	Offices of Lawyers	10.1%	21.0%
541820	Public Relations Agencies	8.7%	29.7%
541611	Administrative Management and General Management Consulting Services	5.7%	35.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	5.5%	40.8%
518210	Data Processing, Hosting, and Related Services	5.3%	46.1%
541310	Architectural Services	5.0%	51.1%
238910	Site Preparation Contractors	4.9%	56.0%
236220	Commercial and Institutional Building Construction	4.8%	60.9%
561210	Facilities Support Services	3.6%	64.5%
561612	Security Guards and Patrol Services	3.4%	67.9%
238310	Drywall and Insulation Contractors	2.6%	70.5%
238350	Finish Carpentry Contractors	2.3%	72.9%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
541840	Media Representatives	2.2%	75.1%
541613	Marketing Consulting Services	2.2%	77.3%
541320	Landscape Architectural Services	2.1%	79.4%
562910	Remediation Services	1.9%	81.3%
323111	Commercial Printing (except Screen and Books)	1.5%	82.8%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	1.4%	84.2%
541612	Human Resources Consulting Services	1.4%	85.6%
541330	Engineering Services	1.0%	86.5%
561720	Janitorial Services	0.9%	87.4%
541511	Custom Computer Programming Services	0.9%	88.3%
541620	Environmental Consulting Services	0.9%	89.2%
511210	Software Publishers	0.8%	90.1%
237310	Highway, Street, and Bridge Construction	0.8%	90.9%
561320	Temporary Help Services	0.7%	91.6%
541990	All Other Professional, Scientific, and Technical Services	0.7%	92.2%
336112	Light Truck and Utility Vehicle Manufacturing	0.6%	92.8%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	0.6%	93.4%
238320	Painting and Wall Covering Contractors	0.5%	94.0%
238160	Roofing Contractors	0.5%	94.5%
238130	Framing Contractors	0.5%	95.0%
237130	Power and Communication Line and Related Structures Construction	0.5%	95.5%
561312	Executive Search Services	0.4%	95.9%
238390	Other Building Finishing Contractors	0.4%	96.3%
541910	Marketing Research and Public Opinion Polling	0.4%	96.7%
238330	Flooring Contractors	0.4%	97.1%
238990	All Other Specialty Trade Contractors	0.3%	97.4%
238340	Tile and Terrazzo Contractors	0.3%	97.7%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
561730	Landscaping Services	0.3%	98.0%
541211	Offices of Certified Public Accountants	0.3%	98.3%
238150	Glass and Glazing Contractors	0.3%	98.6%
541370	Surveying and Mapping (except Geophysical) Services	0.3%	98.9%
512110	Motion Picture and Video Production	0.2%	99.1%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.2%	99.2%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.2%	99.4%
541618	Other Management Consulting Services	0.2%	99.6%
238120	Structural Steel and Precast Concrete Contractors	0.2%	99.7%
238290	Other Building Equipment Contractors	0.1%	99.8%
541430	Graphic Design Services	0.1%	99.9%
541690	Other Scientific and Technical Consulting Services	0.1%	99.9%
541810	Advertising Agencies	0.04%	100.0%
237990	Other Heavy and Civil Engineering Construction	0.04%	100.0%
561492	Court Reporting and Stenotype Services	0.004%	100.0%
TOTAL		100.0%	

Source: CHA analysis of Central Health data

To determine the geographic market area, we applied the standard of identifying the firm locations that account for at least 75% of contract and subcontract dollar payments in the FCDF.⁶ Firm location was determined by zip code and aggregated into counties as the geographic unit. Contracts awarded to firms located in the State of Texas accounted for 89.2% of all dollars during the Study period. The two counties within the Austin metropolitan area – Travis and Williamson – captured 83.1% of the dollars spent in the State of Texas and 74.2% of the entire FCDF. Therefore, these two counties were determined to be the geographic market for Central Health, and we limited our analysis to firms in these counties.

6. J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, National Academies of Sciences, Engineering, and Medicine, 2010, at p. 29, (“National Disparity Study Guidelines”).

The next step was to determine the dollar value of Central Health’s utilization of M/WBEs as measured by payments to prime firms and subcontractors and disaggregated by race and gender.⁷

Table 1-4 presents the distribution of contract dollars for fiscal years 2013 through 2019. Details are provided in Chapter III.

**Table 1-4: Summary of Distribution of Contract Dollars by Race and Gender
(share of total dollars)**

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
TOTAL	1.3%	5.5%	1.0%	0.0%	7.8%	16.0%	23.8%	76.2%	100.0%

Source: CHA analysis of Central Health data

Using the modified “custom census” approach to estimating availability and the further assignment of race and gender using the FCDF, the Master M/W/DBE Directory and other sources, we determined the unweighted availability of M/WBEs in Central Health’s market area. Table 1-5 presents this data. For further explanation of the role of unweighted and weighted availability and how these are calculated, please see Appendix D.⁸

Table 1-5: Aggregated Unweighted M/WBE Availability

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
0.9%	1.9%	0.9%	0.1%	3.8%	5.1%	8.9%	91.1%	100.0%

Source: CHA analysis of Central Health data

We next determined the aggregated availability of M/WBEs, weighted by Central Health’s spending in its geographic and industry markets. Table 1-6 presents these results. The overall, weighted M/WBE availability result can be used by Central Health to determine its overall, aspirational goal.

7. For our analysis, the term “M/WBE” includes firms that are certified by government agencies and minority- and woman-owned firms that are not certified.

8. The USDOT “Tips for Goal Setting” urges recipients to weight their headcount of firms by dollars spent. See Tips for Goal-Setting in the Disadvantaged Business Enterprise Program, <https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

Table 1-6: Aggregated Weighted Availability

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
1.2%	3.4%	1.1%	0.2%	5.9%	7.8%	13.7%	86.3%	100.0%

Source: CHA analysis of the Central Health data; Hoovers; CHA Master Directory

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

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

- $DR = U/WA$

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

The courts have held that disparity results must be analyzed to determine whether the results are “significant”. There are two distinct methods to measure a result’s significance. First, a “large” or “substantively significant” disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. A substantively significant disparity supports the inference that the result may be caused by the disparate impacts of discrimination.⁹ Second, statistically significant disparity means that an outcome is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone.¹⁰ A more in-depth discussion of statistical significance is provided in Chapter IV and Appendix C. Table 1-7 presents the calculated disparity ratios for each demographic group. The disparity ratio for Native Americans is substantively significant.

9. See U.S. Equal Employment Opportunity Commission regulation, 29 C.F.R. §1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”).

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

Table 1-7: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE
Disparity Ratio	109.1%	161.5%	92.8%	0.0%‡	131.4%	206.0%	173.7%*	88.3%**

Source: CHA analysis of the Central Health data
 ** Indicates statistical significance at the 0.01 level
 * Indicates statistical significance at the 0.05 level
 ‡ Indicates substantive significance

It is standard CHA practice to explore any M/WBE disparity ratio that exceeds 100%. This is to ensure that an abnormal pattern of M/WBE concentration does not account for disparity ratios greater than 100%, thereby leading to the unwarranted conclusion that race- or gender-conscious remedies are no longer needed to redress discrimination against a particular socially disadvantaged group. It is possible that a group’s disparity ratio that is larger than 100% might be the result of the success of a few firms and not indicative of the experiences of the broad set of firms in that group. Given the disparity ratio figures for Blacks, Hispanics, and White women presented in Table 1-7, we analyzed the contract data for these three groups. We examined those NAICS codes where the NAICS code share of overall spending (the weight) exceeds six percent and the particular M/WBE utilization in that code exceeds six percent. Table 1-8 presents the results of that exploration. More detail is presented in Chapter III.

Table 1-8: Comparing M/WBE Outcomes and Non-M/WBE Outcomes in NAICS Codes where the NAICS Code Weight Exceeds 6% and the M/WBE utilization in that Code Exceeds 6%

NAICS	NAICS Code Description	Weight	M/WBE Group Utilization	NAICS Code Share of M/WBE Group Spending	NAICS Code Share of Non-M/WBE Spending	Ratio of M/WBE Share to Non-M/WBE Share
Black compared to Non-M/WBE						
541110	Offices of Lawyers	13.3%	8.1%	85.1%	15.1%	5.6
Hispanic compared to Non-M/WBE						
541820	Public Relations Agencies	9.4%	9.4%	16.3%	5.0%	3.3
541310	Architectural Services	6.1%	6.6%	7.3%	0.8%	9.1

NAICS	NAICS Code Description	Weight	M/WBE Group Utilization	NAICS Code Share of M/WBE Group Spending	NAICS Code Share of Non-M/WBE Spending	Ratio of M/WBE Share to Non-M/WBE Share
White women compared to Non-M/WBE						
541820	Public Relations Agencies	9.4%	49.9%	29.4%	5.0%	5.9
238210	Electrical Contractors and Other Wiring Installation Contractors	7.4%	29.1%	13.4%	6.8%	2.0
541310	Architectural Services	6.1%	83.2%	31.8%	0.8%	39.8

Source: CHA analysis of Central Health data

We found that in these targeted codes, the NAICS codes share of overall spending was much more important for M/WBEs than it was for non-M/WBEs. The greater M/WBE reliance on these codes ranged from twice as important (comparing White women outcomes in NAICS code 238210 to non-M/WBE outcomes in NAICS code 238210) to almost 40 times more important (comparing White women outcomes in NAICS code 541310 to non-M/WBE outcomes in NAICS code 541310).

C. Analysis of Disparities in the Central Health Area Economy

Evidence of the experiences of minority- and woman-owned firms outside of the M/WBE programs is relevant and probative of the likely results of Central Health adopting a race-neutral program, because contracting diversity programs are rarely imposed outside of specific government agencies. To examine the outcomes throughout the Austin area economy, we explored two Census Bureau datasets and the government and academic literature relevant to how discrimination in the Austin market and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in Central Health’s prime contract and sub-contract opportunities.

We analyzed the following data and literature:

- The U.S. Bureau of the Census’ *American Community Survey* for the Austin-Round Rock Metropolitan Statistical Area from 2015 through 2019.¹¹ This rich

11. This is the formal name for the five-county MSA that covers the counties of Bastrop, Caldwell, Hays, Travis and Williamson

data set establishes with greater certainty any causal links between race, gender and economic outcomes. We employed a multiple regression statistical technique to examine the rates at which minorities and women form firms. In general, we found that even after considering potential mitigating factors, non-Whites and White women form businesses less than White men and their wage and business earnings are less than those of White men. These analyses support the conclusion that barriers to business success do affect non-Whites and White women.

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

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

D. Qualitative Evidence of Race and Gender Barriers in Central Health's Market

In addition to quantitative data, anecdotal evidence of firms' marketplace experiences is relevant to evaluating whether the effects of current or past discrimination continue to impede opportunities for M/WBEs such that race-conscious contract goals are needed to ensure equal opportunities to compete for agency prime contracts. To explore this type of anecdotal evidence, we received input from 13 participants in two small group business owner interviews.

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

- Several minority or female owners reported they face biased and negative assumptions about their qualifications and capabilities.
- Some women felt that they face barriers because of their gender.

- Race was seen as a bigger barrier than gender by some interviewees.
- Several reported they had positive experiences with Central Health’s attempts to utilize minority firms. However, one MBE noted that the attempts seemed perfunctory.
- The commitment of senior leadership was seen as key to opening doors for M/WBEs.
- Obtaining information about solicitations was reported by some interviewees to be especially difficult.
- More outreach and access to information to increase opportunities for M/WBEs was recommended.

Additional anecdotal information from the recent disparity studies conducted by Colette Holt & Associates for various Texas governments presented in Chapter IV further illustrates the difficulties faced by minority and woman business owners in obtaining public and private sector contracts. Although not dispositive, these reports corroborate the barriers faced by minorities and women in the Austin area and overall Texas marketplace.

E. Recommendations to Ensure Equal Opportunities for Central Health Contracts

The quantitative and qualitative evidence reported in this Study present a thorough examination of whether minorities and women doing business in Central Health’s market have full and fair opportunities to compete for Central Health’s prime contracts and associated subcontracts. The findings support the conclusion that M/WBEs continue to suffer discriminatory barriers and the determination that Central Health has a compelling interest in implementing a race- and gender-conscious contracting program. The record— both quantitative and qualitative— establishes that while M/WBEs, other than firms owned by Native Americans, have not experienced significant disparities in their access to agency contracts, their opportunities outside the agency and in the private sector continue to be constrained by race and/or gender.

Central Health has initiated some efforts to ensure a level the playing field, including providing information on how to conduct business with the agency and engaging in outreach efforts. Firms that have received Central Health contracts report excellent experiences. Importantly, the agency pays on time. However, more could be done. We therefore recommend the implementation of a program that contains the necessary elements for greater success in reducing barriers and that employs national best practices to increase inclusion in government contracting.

As a general matter, Central Health should model its program on the elements of the DBE program for federally assisted transportation contracts. Courts have pointed to an agency's reliance on Part 26 as a guide as evidence that the local agency's program is constitutionally narrowly tailored and employs best practices, regardless of the geographic and industry markets in which it operates.

We therefore make the following recommendations based on this case law and national best practices for M/WBE programs.

1. Implement Race- and Gender-Neutral Measures

The courts require that governments use race- and gender-neutral approaches to the maximum feasible extent to address identified discrimination. This is a critical element of narrowly tailoring the program, so that the burden on non-M/WBEs is no more than necessary to achieve Central Health's remedial purposes. Increased participation by M/WBEs through race-neutral measures will also reduce the need to set M/WBE contract goals.

We therefore suggest the following enhancements of Central Health's current efforts, based on the business owner interviews, the input from senior Central Health management, and national best standards for M/WBE programs.

2. Implement an Electronic Contracting Data Collection, Monitoring and Notification System

One challenge in the Study was data collection of subcontractor records. Implementation of a good electronic contracting data collection, monitoring and notification system is the foundation for a good program and the most critical first step that Central Health should take to implement a Program. A centralized system should include the following functionality:

- Full contract information for all firms.
- Contract/project-specific goal setting (using data from this Study).
- Utilization plan capture for prime contractor and subcontractor utilization plans.
- Contract compliance for certified and non-certified prime contract and subcontract payments for all formally procured contracts for all tiers of all subcontractors.
- Program report generation that provides data on utilization by industries, race, gender, dollar amount, procurement method, etc.
- An integrated email notification and reminder engine to inform contractors of required actions, including reporting mandates and dates.

- Outreach tools for eBlasts and related communications, and event management.
- Access by authorized Central Health staff, prime contractors and subcontractors to perform all necessary activities.

3. Create an Office of Business Diversity

Central Health should create an Office of Business Diversity to oversee all efforts towards contracting diversity and inclusion. This new Office should report directly to the Chief Executive Officer¹² and have the same level of authority as other Departments. This independence will signal the importance of this function and provide it with the bureaucratic stature necessary to move new initiatives forward.

To ensure that Central Health is following best practices for the M/WBE program, staff should be responsible for program elements of the contract award process and contract performance process.

Cooperation and coordination with other functions, such as construction, IT, purchasing, capital planning, and healthcare operations will be essential. The Business Diversity Office is a facilitation function, not a direct user department, so its mission must be integrated into all Central Health departments. To succeed, the program must be viewed as the responsibility of everyone, not just the Office.

4. Increase Vendor Outreach and Communication to M/WBEs and Small Firms

Central Health should conduct regularly scheduled vendor outreach events to provide information and address questions regarding upcoming opportunities, as well as facilitate “matchmaking” sessions between prime contractors and subcontractors. These events should include general fairs as well as meetings targeted towards specific industries or communities, e.g., engineering projects.

Further, we suggest that special outreach for larger projects be conducted to firms in those sectors so that they are aware of opportunities and can make connections with other vendors as subcontractors or joint venture partners. As is the case with many governments, the Study revealed that M/WBEs are receiving few opportunities in several industry codes.

12. See 49 C.F.R. §26.45 (“You must have a DBE liaison officer, who shall have direct, independent access to your Chief Executive Officer concerning DBE program matters. The liaison officer shall be responsible for implementing all aspects of your DBE program. You must also have adequate staff to administer the program in compliance with this part.”).

Another improvement would be an annual contracting forecast of larger contracts to permit vendors to plan their work and form teams. Providing information about upcoming bid opportunities¹³ is one race- and gender-neutral measure that will assist all firms to access information.

Training and information on how to do business with Central Health and on all aspects of contracting is another enhancement Central Health should consider. We recommend written materials and training videos be posted to Central Health's website.

5. Consider Partnering with Other Agencies and Local Organizations to Provide Bonding, Financing and Technical Assistance Programs

Both M/WBEs and non-M/WBEs supported services to assist M/WBEs to increase their skills and capabilities. Bonding and financing programs assist small firms by providing loans and issuing surety bonds to certified contractors, with low interest rates. The programs may also provide general banking services on favorable terms to applicant firms.

Technical assistance with critical business skills such as estimating, bidding, accounting, marketing, legal compliance, etc. could be made available in conjunction with the existing efforts of Austin area governments and organizations. Partnering with local area governments and organizations will allow Central Health to leverage their expertise, knowledge and experience in assisting these types of businesses.

6. Adopt a Minority- and Woman-Owned Business Enterprise Program

The Study's results support the determination that Central Health has a strong basis in evidence to implement a race- and gender-conscious M/WBE program. The record— both quantitative and qualitative— establishes that M/WBEs in Central Health's market area experience significant disparities in their access to market opportunities and the resources necessary for business success.

a. Adopt an Overall, Aspirational Goal for a New M/WBE Program

Central Health should set an annual, overall target for M/WBE utilization in its contracts (prime contracts and subcontracts combined). The availability estimates in Chapter III should be the basis for consideration of the overall, annual spending target for agency funds. We found the weighted availabil-

13. See, for example, the City of Chicago's Buying Opportunities page. <https://www.chicago.gov/city/en/depts/dps/provdrs/contract/svcs/city-of-chicago-consolidated-buying-plan.html> [chicago.gov].

ity of M/WBEs to be 13.7%, which would support an overall goal of 14% for spending with certified firms across all industry categories.

b. Use the Study as the Starting Point in Setting Narrowly Tailored Contract Goals

In addition to setting an overall, annual target, Central Health should use the Study's detailed unweighted availability estimates as the starting point for contract specific goals. As discussed in Chapter II of the Study, Central Health's constitutional responsibility is to ensure that a goal is narrowly tailored to the specifics of the project. A high-quality contracting data collection, monitoring and notification system includes a goal setting module that Central Health should use as its data source.

c. Adopt Narrowly Tailored Program Eligibility Standards

Program eligibility should be limited to firms that have a business presence in the Austin market area, as established by this Study, or that can demonstrate their attempts to do business within that market area.¹⁴

Central Health's new program should accept M/W/DBE certifications from the Texas Unified Certification Program, the State of Texas' HUB program, and the City of Austin. It will be Central Health's constitutional responsibility, to ensure that the certifications it accepts are from narrowly tailored programs with demonstrated integrity.

d. Employ Rigorous Compliance and Monitoring Policies and Procedures

To ensure that the new M/WBE program sets narrowly tailored goals and eligibility requirements, Central Health should adopt contract award and performance standards for program compliance and monitoring that are likewise narrowly tailored and embody best practices. Elements should include the following:

- Clearly delineated policies and forms by which a bidder or proposer can establish that it has either met the contract goal(s) or made good faith efforts to do so.
- Rules for how participation by certified firms will be counted towards the goal(s). For example, a firm must perform a "commercially useful function" in order to be counted for goal attainment. The manner in which various types of goods or services will be credited towards meeting goals also must be clearly spelled out. Further, certified

14. Central Health's market consists of Travis and Williamson Counties.

prime vendors should be permitted to count their self-performance towards meeting the contract goal.

- Contract monitoring policies, procedures and data collection processes. This must include tracking the utilization of certified and non-certified subcontractors at all tiers of performance and monitoring prompt payment obligations of prime contractors to subcontractors. Central Health staff must perform site visits to meet these requirements.
- Criteria and processes for how non-performing, certified firms can be substituted during performance.
- Contract closeout procedures and standards for sanctions for firms that fail to meet their contractual requirements under the Program.
- A process to appeal adverse determinations under the Program that meets due process standards.

e. Provide Training for Central Health Staff with Contracting Responsibilities or Vendor Interface

These significant changes will require an agency-wide roll out of the new program, as well as training of all personnel with contracting and vendor management responsibilities. In addition to providing technical information on compliance, it is also an opportunity to reaffirm Central Health's commitment to business diversity and encourage all departments to buy into these values and objectives.

f. Provide Training for Vendors on the New Program

It will be important for Central Health to provide some formal training on these proposed new program elements to vendors and agency staff. This could consist of web-based seminars that would answer questions such as who is eligible; how to meet goals or establish good faith efforts to do so; how to use the compliance monitoring system; prompt payment obligations; subcontractor substitution; and contract close out. Information should further cover resources to assist small businesses, such as loan program, accessing local Procurement Technical Assistance Centers, and other support.

7. Develop Performance Standards

Central Health should develop quantitative performance measures for overall success of its race- and gender-neutral measures and any M/WBE program to evaluate the effectiveness of various approaches in reducing the systemic bar-

riers identified by the Study. In addition to meeting goals, possible benchmarks might be:

- Progress towards meeting the overall, annual M/WBE goal.
- The number of bids or proposals, industry and the dollar amount of the awards and the goal shortfall, where the bidder was unable to meet the goals and submitted good faith efforts to do so.
- The number, dollar amount and the industry code of bids or proposals rejected as non-responsive for failure to make good faith efforts to meet the goal.
- The number, industry and dollar amount of M/WBE substitutions during contract performance.
- Increased bidding by certified firms as prime vendors.
- Increased prime contract awards to certified firms.
- Increased “capacity” of certified firms, as measured by bonding limits, size of jobs, profitability, complexity of work, etc.
- Increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts.

8. Establish a Program Sunset Date

Central Health should adopt a sunset date for the M/WBE program unless reauthorized. This is a constitutional requirement to meet the narrow tailoring test that race- and gender-conscious measures be used only when necessary. A new disparity study or other applicable research should be commissioned in time to meet the sunset date.

II. LEGAL STANDARDS FOR LOCAL GOVERNMENT CONTRACTING EQUITY PROGRAMS

A. Summary of Constitutional Equal Protection Standards

To be effective, enforceable, and legally defensible, a race-based affirmative action program that is designed to promote equity in public sector contracting, such as one that might be adopted by the Travis County Healthcare District, doing business as Central Health (“Central Health”), must meet the judicial test of constitutional “strict scrutiny”.¹⁵ Strict scrutiny constitutes the highest level of judicial review.¹⁶ Strict scrutiny analysis is comprised of two prongs:

1. The government must establish its “compelling interest” in remediating race discrimination by current “strong evidence” of the persistence of discrimination. Such evidence may consist of the entity’s “passive participation” in a system of racial exclusion.
2. Any remedies adopted must be “narrowly tailored” to that discrimination; the program must be directed at the types and depth of discrimination identified.¹⁷

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

1. Quantitative or statistical evidence of the underutilization of minority- or woman-owned firms by the agency and/or throughout the agency’s geographic and industry market area compared to their availability in the market area.
2. Qualitative or anecdotal evidence of race- or gender-based barriers to the full and fair participation of minority- and woman-owned firms in the market area or in seeking contracts with the agency.¹⁸ Anecdotal data can consist of

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

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

17. *Croson*, 488 U.S. at 510.

interviews, surveys, public hearings, academic literature, judicial decisions, legislative reports, and other information.

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

1. The necessity of relief;¹⁹
2. The efficacy of race-neutral remedies at overcoming identified discrimination;²⁰
3. The flexibility and duration of the relief, including the availability of waiver provisions;²¹
4. The relationship of numerical goals to the relevant labor market;²² and
5. The impact of the relief on the rights of third parties.²³

In *Adarand v. Peña*,²⁴ the United States Supreme Court extended the analysis of strict scrutiny, the most exacting standard of review, to race-based federal enactments such as the United States Department of Transportation (“USDOT”) Disadvantaged Business Enterprise (“DBE”) program for federally assisted transportation contracts. Similar to the local government context, the national legislature must have a compelling governmental interest for the use of race, and the remedies adopted must be narrowly tailored to that evidence.^{25,26}

Most federal courts, including the Fifth Circuit,²⁷ have subjected preferences for Woman-Owned Business Enterprises (“WBEs”) to “intermediate scrutiny”.²⁸ Gen-

18. *Id.* at 509.

19. *Id.* at 507.

20. *United States v. Paradise*, 480 U.S. 149, 171 (1987).

21. *Id.*

22. *Id.*

23. *Croson*, 488 U.S. at 506.

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

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

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

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

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

der-based classifications must be supported by an “exceedingly persuasive justification” and be “substantially related to the objective”.²⁹ The quantum of evidence necessary to satisfy intermediate scrutiny is less than that required to satisfy strict scrutiny. However, appellate courts have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program³⁰ or have held that the results would be the same under strict scrutiny.³¹

Classifications not based upon a suspect class (race, ethnicity, religion, national origin or gender) are subject to the lesser standard of review referred to as “rational basis” scrutiny.^{32,33} The courts have held there are no equal protection implications under the Fourteenth Amendment of the United States Constitution for groups not subject to systemic discrimination.³⁴ In contrast to strict scrutiny and to intermediate scrutiny, rational basis means the governmental action or statutory classification must be “rationally related” to a “legitimate” government interest.³⁵ Thus, preferences for persons with disabilities or veteran status may be enacted with vastly less evidence than that required for race- or gender-based measures to combat historic discrimination.³⁶

Unlike most legal challenges, the defendant bears the initial burden of producing “strong evidence” in support of its race-conscious program.³⁷ As held by the Fifth Circuit,³⁸ the plaintiff must then proffer evidence to rebut the government’s case, and bears the ultimate burden of production and persuasion that the affirmative action program is unconstitutional.³⁹ “[W]hen the proponent of an affirmative action plan produces sufficient evidence to support an inference of discrimination, the plaintiff must rebut that inference in order to prevail.”⁴⁰

29. *Cf. United States v. Virginia*, 518 U.S. 515, 532 n.6 (1996).

30. *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 720 (7th Cir. 2007), (“*Northern Contracting III*”).

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

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

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

34. *See generally United States v. Carolene Products Co.*, 304 U.S. 144 (1938).

35. *Heller v. Doe*, 509 U.S. 312, 320 (1993).

36. The standard applicable to status based on sexual orientation or gender identity has not yet been clarified by the courts.

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

38. *W.H. Scott Construction*, 199 F.3d at 206, 215.

39. *See, e.g., Baltimore I*, 83 F. Supp. 2d at 613, 620; *W.H. Scott Construction*, 199 F.3d at 206, 215; *Engineering Contractors II*, at 907-911; *Concrete Works II*, 36 F.3d at 1513, 1519; *Philadelphia II*, 6 F. 3d at 990, 1009-1011; *Coral Construction Co. v. King County*, 941 F. 2d 910, 930-931 (9th Cir. 1991).

40. *Engineering Contractors II*, 122 F.3d at 916.

A plaintiff “cannot meet its burden of proof through conjecture and unsupported criticism of [the government’s] evidence.”⁴¹ To successfully rebut the government’s evidence, a plaintiff must introduce “credible, particularized evidence” that rebuts the government’s showing of a strong basis in evidence.⁴² For example, in the challenge to the Minnesota and Nebraska DBE programs, “plaintiffs presented evidence that the data was susceptible to multiple interpretations, but they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to, and participation in, federally assisted highway contracts. Therefore, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.”⁴³ When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.⁴⁴ A plaintiff cannot rest upon general criticisms of studies or other related evidence; it must meet its burden that the government’s proof is inadequate to meet strict scrutiny, rendering the legislation or government program illegal.⁴⁵

To meet strict scrutiny, studies such as those listed in the recent U.S. Department of Justice Report⁴⁶ as well as this Report, have been conducted to gather the statistical and anecdotal evidence necessary to support the use of race- and gender-conscious measures to combat discrimination. These are commonly referred to as “disparity studies” because they analyze any disparities between the opportunities and experiences of minority- and woman-owned firms and their actual utilization compared to White male-owned businesses. More rigorous studies also examine the elements of the agency’s program to determine whether it is sufficiently narrowly tailored. The following is a detailed discussion of the legal parameters and the requirements for conducting studies to support legally defensible programs.

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41. *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 989 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (10th Cir. 2003) (“*Concrete Works IV*”).
 42. *H.B. Rowe Co., Inc. v. W. Lyndo Tippet, North Carolina DOT, et al.*, 615 F.3d 233, 241-242(4th Cir. 2010); *Midwest Fence Corp. v. U.S. Department of Transportation, Illinois Department of Transportation, Illinois State Toll Highway Authority*, 84 F. Supp. 3d 705 (N.D. Ill. 2015) (“*Midwest Fence I*”), *aff’d* 840 F.3d 932 (7th Cir. 2016) (“*Midwest Fence II*”).
 43. *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d. 964, 970 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).
 44. *Coral Construction*, 941 F. 2d at 921; *Engineering Contractors II*, 122 F.3d at 916.
 45. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10th Cir. 2000), *cert. granted*, 532 U.S. 941, 1166, *then dismissed as improvidently granted*, 534 U.S. 103 (2001) (“*Adarand VII*”); *Engineering Contractors II*, 122 F.3d at 916; *Concrete Works II*, 36 F.3d at 1513, 1522-1523 ; *Webster v. Fulton County, Georgia*, 51 F.Supp.2d 1354, 1364 (N.D. Ga. 1999), *aff’d per curiam*, 218 F. 3d 1267 (11th Cir. 2000); *see also Wygant v. Jackson Board of Education*, 476 U.S. 267, 277-278 (1986).
 46. The report, released on January 20, 2022, is available at: <https://www.justice.gov/crt/page/file/1463921/download>.

B. Elements of Strict Constitutional Scrutiny

In its decision in *City of Richmond v. J.A. Croson Co.*, the United States Supreme Court established the constitutional contours of permissible race-based public contracting programs. Reversing long established Equal Protection jurisprudence,⁴⁷ the Court, for the first time, extended the highest level of judicial examination from measures designed to limit the rights and opportunities of minorities to legislation that inures to the benefit of these victims of historic, invidious discrimination. Strict scrutiny requires that a government entity prove both its “compelling governmental interest” in remediating identified discrimination based upon “strong evidence”⁴⁸ and that the measures adopted to remedy that discrimination are “narrowly tailored” to that evidence. However benign the government’s motive, race is always so suspect a classification that its use must pass the highest constitutional test of “strict scrutiny”.

The Court struck down the City of Richmond’s Minority Business Enterprise Plan (“Plan”) because it failed to satisfy the strict scrutiny analysis applied to “race-based” government programs. The City’s “setaside” Plan required prime contractors awarded City construction contracts to subcontract at least 30% of the dollar amount of contracts to one or more Minority-Owned Business Enterprises (“MBEs”).⁴⁹ A business located anywhere in the nation was eligible to participate so long as it was at least 51% owned and controlled by minority citizens or lawfully-admitted permanent residents.

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

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

47. U.S. Const. Amend. XIV, §1.

48. There is no precise mathematical formula to assess what rises to the level of “strong evidence”.

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

[A] state or local subdivision...has the authority to eradicate the effects of private discrimination within its own legislative jurisdiction.... [Richmond] can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment...[I]f the City could show that it had essentially become a “passive participant” in a system of racial exclusion ...[it] could take affirmative steps to dismantle such a system.⁵⁰

Strict scrutiny of race-based remedies is required to determine whether racial classifications are in fact motivated by notions of racial inferiority or blatant racial politics. This highest level of judicial review “smokes out” illegitimate uses of race by ensuring that the legislative body is pursuing an important enough goal to warrant use of a highly suspect tool.⁵¹ It also ensures that the means chosen “fit” this compelling goal so closely that there is little or no likelihood that the motive for the classification was illegitimate racial prejudice or stereotype. The Court made clear that strict scrutiny is designed to expose racial stigma; racial classifications are said to create racial hostility if they are based on notions of racial inferiority.

Richmond’s evidence was found to be lacking in every respect.⁵² The City could not rely upon the disparity between its utilization of MBE prime contractors and Richmond’s minority population because not all minority persons would be qualified to perform construction projects; general population representation is irrelevant. No data were presented about the availability of MBEs in either the relevant market area or their utilization as subcontractors on City projects.

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

50. 488 U.S. at 491-92.

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

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

In the case at hand, the City has not ascertained how many minority enterprises are present in the local construction market nor the level of their participation in City construction projects. The City points to no evidence that qualified minority contractors have been passed over for City contracts or subcontracts, either as a group or in any individual case. Under such circumstances, it is simply impossible to say that the City has demonstrated “a strong basis in evidence for its conclusion that remedial action was necessary.”⁵³

This analysis was applied only to Blacks. The Court emphasized that there was “absolutely no evidence” of discrimination against other minorities. “The random inclusion of racial groups that, as a practical matter, may have never suffered from discrimination in the construction industry in Richmond, suggests that perhaps the City’s purpose was not in fact to remedy past discrimination.”⁵⁴

Having found that Richmond had not presented evidence in support of its compelling interest in remediating discrimination—the first prong of strict scrutiny—the Court made two observations about the narrowness of the remedy—the second prong of strict scrutiny. First, Richmond had not considered race-neutral means to increase MBE participation. Second, the 30% quota had no basis in evidence, and was applied regardless of whether the individual MBE had suffered discrimination.⁵⁵ The Court noted that the City “does not even know how many MBEs in the relevant market are qualified to undertake prime or subcontracting work in public construction projects.”⁵⁶

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

Nothing we say today precludes a state or local entity from taking action to rectify the effects of identified discrimination within its jurisdiction. If the City of Richmond had evidence before it that non-minority contractors were systematically excluding minority businesses from subcontracting opportunities, it could take action to end the discriminatory exclusion. Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise. Under such circumstances, the City could act to dismantle the closed business system by taking appropriate measures against those who discriminate

53. *Croson*, 488 U.S. at 510.

54. *Id.*

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

56. *Croson*, 488 U.S. at 502.

based on race or other illegitimate criteria. In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.... Moreover, evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified.⁵⁷

While much has been written about *Croson*, it is worth stressing what evidence was, and was not, before the Court. First, Richmond presented *no* evidence regarding the availability of MBEs to perform as prime contractors or subcontractors and *no* evidence of the utilization of minority-owned subcontractors on City contracts.⁵⁸ Nor did Richmond attempt to link the remedy it imposed to any evidence specific to the program; it used the general population of the City rather than any measure of business availability.

Some commentators have taken this dearth of any particularized proof and argued that only the most particularized proof can suffice in all cases. They leap from the Court's rejection of Richmond's reliance on only the percentage of Blacks in the City's population to a requirement that only firms that bid or have the "capacity" or "willingness" to bid on a particular contract at a particular time can be considered in determining whether discrimination against Black businesses infects the local economy.⁵⁹

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

[I]t is important to remember what the *Croson* plurality opinion did and did not decide. The Richmond program, which the *Croson* Court struck down, was insufficient because it was based on a comparison of the minority population in its entirety in Richmond, Virginia (50%) with the number of contracts awarded to minority businesses (0.67%). There were no statistics presented regarding the number of minority-owned contractors in the Richmond area, *Croson*, 488 U.S. at 499, and the Supreme Court was concerned with the gross generality of the statistics used in justifying the Richmond program. There is no indication that the statistical analysis performed by [the consultant] in the present case, which does contain statistics regarding minority contractors in New York City, is not sufficient as a matter of law under *Croson*.⁶⁰

57. *Id.* at 509 (citations omitted).

58. *Id.* at 502.

59. *See, for example, Northern Contracting III*, 473 F.3d at 723.

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

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

C. Establishing a “Strong Basis in Evidence” for a Central Health Program for Minority- and Woman-Owned Businesses

The case law on the U.S. Department of Transportation’s DBE program should guide Central Health’s program for locally funded contracts, since the constitutional standards do not vary by the type of government entity or the geographic or industry markets in which it operates. Whether the program is called an M/WBE program or a DBE program or any other moniker, the strict scrutiny test applies. The DBE program regulations⁶¹ have been upheld by every court⁶², and local programs for Minority- and Woman-Owned Business Enterprises will be judged against the following legal framework.⁶³

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

- Disparities between the earnings of minority-owned firms and similarly situated non-minority owned firms;

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

61. 49 C.F.R. Part 26.

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

63. *Midwest Fence II*, 840 F.3d. at 953.

- Disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners;
- The large and rapid decline in minorities' participation in the construction industry when affirmative action programs were struck down or abandoned; and
- Various types of overt and institutional discrimination by prime contractors, trade unions, business networks, suppliers, and sureties against minority contractors.⁶⁴

The regulations were facially narrowly tailored.

- The overall goal must be based upon demonstrable evidence of the number of ready, willing, and able DBEs.
- The goal may be adjusted to reflect the availability of DBEs “but for” the effects of the DBE program and of discrimination.
- The recipient must meet the maximum feasible portion of the goal through race-neutral measures.
- The use of quotas and set-asides is limited to only those situations where there is no other remedy.
- The overall, triennial goals are to be adjusted during the year to remain narrowly tailored.
- The presumption of social disadvantage for racial and ethnic minorities and women is rebuttable, “wealthy minority owners and wealthy minority firms are excluded, and certification is available to persons who are not presumptively disadvantaged but can demonstrate actual social and economic disadvantage.”⁶⁵

As previously noted, programs for veterans, persons with disabilities, preferences based on geographic location or truly race- and gender-neutral small business efforts are not subject to strict scrutiny but rather the lower level of scrutiny called “rational basis”. Therefore, no evidence comparable to that in a disparity study is needed to enact such initiatives.

It is well established that disparities between an agency's utilization of M/WBEs and their availability in the relevant marketplace provide a sufficient basis for the consideration of race- or gender-conscious remedies. Proof of the disparate impacts of economic factors such as access to capital and bonding on M/WBEs⁶⁶ and the disparate treatment of such firms by actors critical to their success will

64. *Western States*, 407 F.3d at 992-93.

65. *Sherbrooke*, 345 F.3d. at 973.

meet strict scrutiny. Discrimination must be shown using statistics and economic models to examine the effects of systems or markets on different groups, as well as by evidence of personal experiences with discriminatory conduct, policies or systems.⁶⁷ Specific evidence of discrimination or its absence may be direct or circumstantial and should include economic factors and opportunities in the private sector affecting the success of M/WBEs.⁶⁸ A stark disparity in DBE participation rates on goals and non-goals contracts, when combined with the statistical and anecdotal evidence of discrimination in the relevant marketplaces, has been held to support the use of race-conscious goals.⁶⁹

Croson's admonition that "mere societal" discrimination is not enough to meet strict scrutiny is met where the government presents evidence of discrimination in the industry targeted by the program. "If such evidence is presented, it is immaterial for constitutional purposes whether the industry discrimination springs from widespread discriminatory attitudes shared by society or is the product of policies, practices, and attitudes unique to the industry... The genesis of the identified discrimination is irrelevant." There is no requirement to "show the existence of specific discriminatory policies and that those policies were more than a reflection of societal discrimination."⁷⁰

Central Health need not prove that it is itself guilty of discrimination to meet its burden. In upholding Denver's M/WBE construction program, the Tenth Circuit stated that Denver can show its compelling interest by "evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination...[by] linking its spending practices to the private discrimination."⁷¹ Denver further linked its award of public dollars to discriminatory conduct through the testimony of M/WBEs that identified general contractors who used them on City projects with M/WBE goals but refused to use them on private projects without goals.

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

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

67. *Adarand VII*, 228 F.3d at 1166 ("statistical and anecdotal evidence are appropriate").

68. *Id.*

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

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

71. *Id.* at 977.

formation rates and business earnings of minorities and women compared to similarly situated non-minority males.⁷²

1. Define Central Health’s Market Area

The first step is to determine the market area in which Central Health operates. *Croson* states that a state or local government may only remedy discrimination within its own contracting market area. The City of Richmond was specifically faulted for including minority contractors from across the country in its program, based on national data considered by Congress.⁷³ Central Health must therefore empirically establish the geographic and product dimensions of its contracting and procurement market area to ensure that the program meets strict scrutiny. This is a fact driven inquiry; it may or may not be the case that the market area is the government’s jurisdictional boundaries.⁷⁴ This study employs long established economic principles to empirically establish Central Health’s geographic and product market area to ensure that any program based on the study satisfies strict scrutiny.

A commonly accepted definition of geographic market area for disparity studies is the locations that account for at least 75% of the agency’s contract and subcontract dollar payments.⁷⁵ Likewise, the accepted approach is to analyze those detailed industries that make up at least 75% of the prime contract and associated subcontract payments for the study period.⁷⁶ This produces the utilization results within the geographic market area.⁷⁷

2. Determine Central Health’s Utilization of Minority- and Woman-Owned Businesses

The study should next determine Central Health’s utilization of minority- and woman-owned businesses (“M/WBEs/HUBs”) in its market area. Generally, this analysis should be limited to formally procured contracts, since it is unlikely that it is realistic or useful to set goals on small dollar purchases.

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

73. *Croson*, 488 U.S. at 508.

74. *Concrete Works II*, 36 F.3d at 1520 (to confine data to strict geographic boundaries would ignore “economic reality”).

75. J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, National Academies of Sciences, Engineering, and Medicine, 2010 (“*National Disparity Study Guidelines*”).

76. *Id.*

77. For this Report, we found Central Health’s market area to be Travis and Williamson counties. Please see Chapter III.

Developing the file for analysis involves the following steps, regardless of funding source:

1. Develop the Initial Contract Data File. This involves first gathering Central Health's records of its payments to prime contractors, and if available, associated subcontractors.
2. Develop the Sample Contract Data File, if necessary. If the Initial Contract Data File is too large to complete all the missing contract records, a sample should be drawn. Standard statistical procedures should be utilized that result in a sample whose basic parameters (distribution of the number of contracts and the value of contract dollars) mirror the broad industry sectors (*i.e.*, construction; construction-related services; goods; and services) in the Initial Contract Data File. In addition, the total number of contracts must allow for a statistically representative sample at the 95% confidence level and a five percent confidence interval. These parameters are the norm in statistical sample procedures.
3. Develop the Final Contract Data File. Whatever data are missing (often race and gender ownership, North American Industry Classification System ("NAICS") or other industry codes, work descriptions or other important information not collected by the agency) must be fully reconstructed by the consultant. While painstaking and labor intensive, this step cannot be skipped. Using surveys is unlikely to yield sufficient data, and so each contract must be examined, and the record completed to ensure a full and accurate picture of the agency's activities. It is also important to research whether a firm that has an address outside the market area has a location in the market area (contract records often have far flung addresses for payments). All necessary data for at least 80% of the contract dollars in the final contract data files should be collected to ensure a comprehensive file that mirrors Central Health's contracting and procurement activities.
4. Determining the Geographic Market. The federal courts require that a government agency narrowly tailor its race- and gender-conscious contracting program elements to its geographic market area.⁷⁸ This element of the analysis must be empirically established⁷⁹ and the accepted approach is to analyze those detailed industries, as defined by

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

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

6-digit NAICS codes, that make up at least 75% of the prime contract and subcontract payments for the study period.⁸⁰

3. Determine the Availability of Minority- and Woman-Owned Businesses in Central Health’s Market Area

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

The availability analysis involves the following steps:

1. The development of the Merged Business Availability List. Three data sets are used to develop the Merged Business Availability List:
 - The firms in the M/W/DBE Master Directory developed for Central Health. This methodology includes both certified firms and non-certified firms owned by minorities or women.⁸¹ The Master Directory consists of all available government and private D/M/WBE directories, limited to firms within Central Health’s geographic and product market.
 - The firms contained in Central Health’s contract data files. This will require the elimination of any duplications because a firm might have received more than one contract for work in a given NAICS code during the study period.
 - Firms extracted from the Dun & Bradstreet MarketPlace/Hoovers database, using the relevant geographic and product market definitions.
2. The estimation of unweighted availability. The Merged Business Availability List will be the available universe of relevant firms for the study. This process will significantly improve the identification of minority-owned and woman-owned businesses in the business population. Race and sex must be assigned to any firm not already

80. See *National Disparity Study Guidelines*, at 29-30.

81. *Id.* at 33-34.

classified.⁸² This will produce estimates of minority and woman business availability in Central Health’s markets for each NAICS code in the product market; for woman and minority business availability for all NAICS codes combined; and for the broad industry categories of goods, services and construction. The detailed results should also be the basis for contract specific goal setting methodology.

3. The estimation of weighted availability. Using the weights from the utilization analysis, the unweighted availability should be adjusted for the share of Central Health’s spending in each NAICS code. The unweighted availability determination will be weighted by the share of dollars Central Health actually spends in each NAICS code, derived from the utilization analysis. These resulting weighted availability estimates will be used in the calculation of disparity indices for Central Health’s contracts.

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

This three-part methodology for estimating availability is usually referred to as the “custom census” approach with refinements. This approach is favored for several reasons. As recognized by the courts and the *National Disparity Study Guidelines*,⁸³ this methodology in general is superior to the other methods for at least four reasons.

- First, it provides an internally consistent and rigorous “apples to apples” comparison between firms in the availability numerator and those in the denominator. Other approaches often have different definitions for the firms in the numerator (*e.g.*, certified M/WBEs or firms that respond to a survey) and the denominator (*e.g.*, registered vendors or the Census Bureau’s County Business Patterns data).

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

83. *National Disparity Study Guidelines*, at 57-58.

- Second, by examining a comprehensive group of firms, it “casts a broader net” beyond those known to the agency. As held by the federal court of appeals in finding the Illinois Department of Transportation’s program to be constitutional, the “remedial nature of [DBE programs] militates in favor of a method of D/M/W/SBE availability calculation that casts a broader net” than merely using bidders lists or other agency or government directories. A broad methodology is also recommended by the USDOT for the federal DBE program, which has been upheld by every court.⁸⁴ A custom census is less likely to be tainted by the effects of past and present discrimination than other methods, such as bidders lists, because it seeks out firms in the agency’s market areas that have not been able to access its opportunities.
- Third, this approach is less impacted by variables affected by discrimination. Factors such as firm age, size, qualifications, and experience are all elements of business success where discrimination would be manifested. Several courts have held that the results of discrimination – which impact factors affecting capacity – should not be the benchmark for a program designed to ameliorate the effects of discrimination. They have acknowledged that minority and woman firms may be smaller, newer, and otherwise less competitive than non-M/WBEs because of the very discrimination sought to be remedied by race-conscious contracting programs. Racial and gender differences in these “capacity” factors are the *outcomes* of discrimination, and it is therefore inappropriate as a matter of economics and statistics to use them as “control” variables in a disparity study.⁸⁵
- Fourth, this methodology has been upheld by every court that has reviewed it, including the failed challenge to the Illinois Department of Transportation’s DBE program⁸⁶ and the more recent successful defense of the Illinois State Toll Highway’s DBE program.⁸⁷

Other methodologies relying only on vendor or bidder lists may overstate or understate availability as a proportion of the County’s actual markets because they reflect only the results of the agency’s own activities, not an accurate portrayal of marketplace behavior. Other methods of whittling down availability by using assumptions based on surveys with limited response rates or guesses about firms’ capacities easily lead to findings that woman and minority busi-

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

85. For a detailed discussion of the role of capacity in disparity studies, see the *National Disparity Study Guidelines*, Appendix B, “Understanding Capacity.”

86. *Northern Contracting III*, 473 F.3d at 721.

87. See generally *Midwest Fence II* 840 F.3d 932; *Northern Contracting III*, 473 F.3d 715.

nesses no longer face discrimination or are unavailable, even when the firm is actually working on agency contracts.

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

This test has been rejected by the courts when directly addressed by the plaintiff and the agency. As recognized by the courts and the *National Disparity Study Guidelines*, these capacity factors are not race- and gender-neutral variables. Discriminatory barriers depress the formation rates of firms by minorities and women and the rates of success of such firms in doing business in both the private and public sectors. In a perfectly discriminatory system, M/WBEs would have no “capacity” because they would have been prevented from developing any “capacity”. That certainly would not mean that there was no discrimination or that the government must sit by helplessly and continue to award tax dollars within the “market failure” of discrimination and without recognition of systematic, institutional race- and gender-based barriers. It is these types of “capacity” variables where barriers to full and fair opportunities to compete will be manifested. Capacity limitations on availability would import the current effects of past discrimination into the model, because if M/WBEs are newer or smaller because of discrimination, then controlling for those variables will mask the phenomenon of discrimination that is being studied. In short, identifiable indicators of capacity are themselves impacted and reflect discrimination. The courts have agreed. Based on expert testimony, judges understand that factors such as size and experience reflect outcomes influenced by race and gender: “M/WBE construction firms are generally smaller and less experienced *because* of discrimination.”⁸⁸

To rebut this framework, a plaintiff must proffer its own study showing that the disparities disappear when whatever variables it believes are important are held constant and that controlling for firm specialization explained the disparities.⁸⁹ Significantly, *Croson* does not “require disparity studies that measure whether construction firms are able to perform a *particular contract*.”⁹⁰

There are also practical reasons not to circumscribe availability through “capacity” limitations. First, there is no agreement concerning what variables

88. *Concrete Works IV*, 321 F.3d at 983 (emphasis in the original).

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

90. *Croson*, 488 U.S. at 508 (emphasis in the original).

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

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

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

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

Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such

contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise... In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.⁹¹

This is known as the “disparity ratio” or “disparity index”. A disparity ratio measures the participation of a group in the government’s contracting opportunities by dividing that group’s utilization by the availability of that group and multiplying that result by 100. Courts have looked to disparity indices in determining whether strict scrutiny is satisfied.⁹² An index of less than 100% indicates that a given group is being utilized less than would be expected based on its availability.

The courts have held that disparity results must be analyzed to determine whether the results are “significant”. There are two distinct methods to measure a result’s significance. First, a “large” or “substantively significant” disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. This is based on the Equal Employment Opportunity Commission’s “Eighty Percent Rule” that a ratio less than 80% presents a *prima facie* case of discrimination by supporting the inference that the result may be caused by the disparate impacts of discrimination.⁹³ Second, statistically significant disparity means that an outcome is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone.⁹⁴ A more in-depth discussion of statistical significance is provided in Appendix C.

In addition to creating the disparity ratio, correct measures of availability are necessary to determine whether discriminatory barriers depress the formation of firms by minorities and women, and the success of such firms in doing business in both the private and public sectors, known as an “economy-wide” disparity analysis.⁹⁵

91. *Croson*, 488 U.S. at 509; see *Webster*, 51 F.Supp.2d at 1363, 1375.

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

93. 29 C.F.R. §1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”); see *Engineering Contractors II*, 122 F3d at 914.

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

95. *Northern Contracting II*, 2005 U.S. Dist. LEXIS 19868 at *69 (IDOT’s custom census approach was supportable because “discrimination in the credit and bonding markets may artificially reduce the number of M/WBEs”).

Central Health need not prove that the statistical inferences of discrimination are “correct”. In upholding Denver’s M/WBE Program, the Tenth Circuit noted that strong evidence supporting Denver’s determination that remedial action was necessary need not have been based upon “irrefutable or definitive” proof of discrimination. Statistical evidence creating inferences of discriminatory motivations was sufficient and therefore evidence of market area discrimination was properly used to meet strict scrutiny. To rebut this type of evidence, the plaintiff must prove by a preponderance of the evidence that such proof does not support those inferences.⁹⁶

Nor must Central Health demonstrate that the “ordinances will *change* discriminatory practices and policies” in the local market area; such a test would be “illogical” because firms could defeat the remedial efforts simply by refusing to cease discriminating.⁹⁷

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

Denver’s only burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and link its spending to that discrimination.... Denver was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. To impose such a burden on a municipality would be tantamount to requiring proof of discrimination and would eviscerate any reliance the municipality could place on statistical studies and anecdotal evidence.⁹⁸

Similarly, statistical evidence by its nature cannot identify the individuals responsible for the discrimination; there is no need to do so to meet strict scrutiny, as opposed to an individual or class action lawsuit.⁹⁹

5. Analyze Economy-Wide Evidence of Race- and Gender-Based Disparities in Central Health’s Market

The courts have repeatedly held that analysis of disparities in the rates at which M/WBEs in the government’s markets form businesses compared to

96. *Concrete Works IV*, 321 F. 3d at 971.

97. *Id.* at 973 (emphasis in the original).

98. *Id.* at 971.

99. *Id.* at 973.

similar non-M/WBEs, their earnings from such businesses, and their access to capital markets are highly relevant to the determination of whether the market functions properly for all firms regardless of the race or gender of their ownership. These analyses contributed to the successful defense of Chicago's construction program.¹⁰⁰ As similarly explained by the Tenth Circuit, this type of evidence

demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination, precluding from the outset competition for public construction contracts by minority enterprises. The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination, precluding existing minority firms from effectively competing for public construction contracts. The government also presents further evidence in the form of local disparity studies of minority subcontracting and studies of local subcontracting markets after the removal of affirmative action programs.... The government's evidence is particularly striking in the area of the race-based denial of access to capital, without which the formation of minority subcontracting enterprises is stymied.¹⁰¹

Business discrimination studies and lending formation studies are relevant and probative because they show a strong link between the disbursement of public funds and the channeling of those funds due to private discrimination. "Evidence that private discrimination results in barriers to business formation is relevant because it demonstrates that M/WBEs are precluded *at the outset* from competing for public construction contracts. Evidence of barriers to fair competition is also relevant because it again demonstrates that *existing* M/WBEs are precluded from competing for public contracts."¹⁰² Despite the contentions of plaintiffs that possibly dozens of factors might influence the ability of any individual to succeed in business, the courts have rejected such impossible tests and held that business formation studies are not flawed

100. *Builders Ass'n of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725, 740 (N.D. Ill. 2003).

101. *Adarand VII*, 228 F.3d at 1147, 1167-68.

102. *Id.*

because they cannot control for subjective descriptions such as “quality of education”, “culture” and “religion”.¹⁰³

For example, in unanimously upholding the DBE Program for federal-aid transportation contracts, the courts agree that disparities between the earnings of minority-owned firms and similarly situated non-minority-owned firms and the disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners are strong evidence of the continuing effects of discrimination.¹⁰⁴ The Eighth Circuit Court of Appeals took a “hard look” at the evidence Congress considered, and concluded that the legislature had

spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry. In rebuttal, [the plaintiffs] presented evidence that the data were susceptible to multiple interpretations, but they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts. Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.¹⁰⁵

6. Evaluate Anecdotal Evidence of Race- and Gender-Based Barriers to Equal Opportunities in Central Health’s Market

A study should further explore anecdotal evidence of experiences with discrimination in contracting opportunities because it is relevant to the question of whether observed statistical disparities are due to discrimination and not to some other non-discriminatory cause or causes. As observed by the Supreme Court, anecdotal evidence can be persuasive because it “brought the cold [statistics] convincingly to life.”¹⁰⁶ Testimony about discrimination practiced by prime contractors, bonding companies, suppliers, and lenders has been found relevant regarding barriers both to minority firms’ business formation and to their success on governmental projects.¹⁰⁷ While anecdotal evidence is insuffi-

103. *Concrete Works IV*, 321 F.3d at 980.

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

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

106. *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

cient 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.”¹⁰⁸ “[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.”¹⁰⁹

There is no requirement that anecdotal testimony be “verified” or corroborated, as befits the role of evidence in legislative decision-making as opposed to judicial proceedings. “Plaintiff offers no rationale as to why a fact finder could not rely on the State’s ‘unverified’ anecdotal data. Indeed, a fact finder could very well conclude that anecdotal evidence need not—indeed cannot—be verified because it ‘is nothing more than a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perception.”¹¹⁰ 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.”¹¹¹

D. Narrowly Tailoring a Race- and Gender-Conscious Program for Central Health

Even if Central Health has a strong basis in evidence to believe that race-based measures are needed to remedy identified discrimination, the program must still be narrowly tailored to that evidence. As discussed above, programs that closely mirror those of the USDOT DBE Program¹¹² have been upheld using that frame-

107. *Adarand VII*, 228 F.3d at 1168-1172.

108. *Concrete Works II*, 36 F.3d at 1520,1530.

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

110. *Id.* at 1579-1580.

111. *Concrete Works IV*, 321 F.3d at 989.

112. 49 C.F.R. Part 26.

work.¹¹³ The courts have repeatedly examined the following factors in determining whether race-based remedies are narrowly tailored to achieve their purpose:

- The necessity of relief;¹¹⁴
- The efficacy of race- and gender-neutral remedies at overcoming identified discrimination;¹¹⁵
- The relationship of numerical benchmarks for government spending to the availability of minority- and woman-owned firms and to subcontracting goal setting procedures;¹¹⁶
- The flexibility of the program requirements, including the provision for good faith efforts to meet goals and contract specific goal setting procedures;¹¹⁷
- The relationship of numerical goals to the relevant market;¹¹⁸
- The impact of the relief on third parties;¹¹⁹ and
- The overinclusiveness of racial classifications.¹²⁰

1. Consider Race- and Gender-Neutral Remedies

Race- and gender-neutral approaches are necessary components of a defensible and effective M/WBE program¹²¹. The failure to seriously consider such remedies has proven fatal to several programs.¹²² Difficulty in accessing procurement opportunities, restrictive bid specifications, excessive experience requirements, and overly burdensome insurance and/or bonding requirements, for example, might be addressed by Central Health without resorting to

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

114. *Croson*, 488 U.S. at 507; *Adarand III*, 515 U.S. at 237-238.

115. *Paradise* at 171.

116. *Id.*

117. *Id.*

118. *Id.*

119. *Croson*, 488 U.S. at 506.

120. *Paradise*, 480 U.S. at 171; see also, *Sherbrooke*, 345 F.3d at 971-972.

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

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

the use of race or gender in its decision-making. Effective remedies include unbundling of contracts into smaller units, providing technical support, and developing programs to address issues of financing, bonding, and insurance important to all small and emerging businesses.¹²³ Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.¹²⁴

The requirement that the agency must meet the maximum feasible portion of the goal through race-neutral measures, as well as estimate that portion of the goal that it predicts will be met through such measures, has been central to the holdings that the DBE program regulations meet narrow tailoring.¹²⁵ The highly disfavored remedy of race-based decision making should be used only as a last resort.

However, strict scrutiny does not require that every race-neutral approach must be implemented and then proven ineffective before race-conscious remedies may be utilized.¹²⁶ While an entity must give good faith consideration to race-neutral alternatives, “strict scrutiny does not require exhaustion of every possible such alternative...however irrational, costly, unreasonable, and unlikely to succeed such alternative might be... [S]ome degree of practicality is subsumed in the exhaustion requirement.”¹²⁷

2. Set Targeted M/WBE/HUB Goals

Numerical goals or benchmarks for M/WBE/HUB participation must be substantially related to their availability in the relevant market.¹²⁸ For example, the DBE program rule requires that the overall goal must be based upon demonstrable evidence of the number of DBEs ready, willing, and able to participate on the recipient’s federally assisted contracts.¹²⁹ “Though the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets. This stands in stark contrast to the program struck down in *Croson*.”¹³⁰

123. See 49 C.F.R. §26.51.0.

124. *Croson*, 488 U.S. at 503 n.3; *Webster*, 51 F.Supp.2d at 1380.

125. See, e.g., *Sherbrooke*, 345 F.3d. at 973.

126. *Grutter*, 529 U.S. at 339.

127. *Coral Construction*, 941 F.2d at 923.

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

129. 49 C.F.R. §26.45 (b).

130. *Id.*

Goals can be set at various levels of particularity and participation. Central Health may set an overall, aspirational goal for its annual, aggregate spending. Annual goals can be further disaggregated by race and gender. Approaches range from a single M/WBE or DBE goal that includes all racial and ethnic minorities and non-minority women,¹³¹ to separate goals for each minority group and women.¹³²

Goal setting is not an absolute science. In holding the DBE regulations to be narrowly tailored, the Eighth Circuit Court of Appeals noted that “[t]hough the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets.”¹³³ However, sheer speculation cannot form the basis for an enforceable measure.¹³⁴

It is settled case law that goals for a particular solicitation should reflect the particulars of the contract, not reiterate annual aggregate targets; goals must be contract specific. “Standard” goals are not defensible, nor should the annual aspirational goals function as a predetermined floor. Contract goals must be based upon availability of M/WBEs/HUBs to perform the anticipated scopes of the contract, location, progress towards meeting annual goals, and other factors. Not only is this legally mandated,¹³⁵ but this approach also reduces the need to conduct good faith efforts reviews, as well as the temptation to create “front” companies and sham participation to meet unreasonable contract goals. While this is more labor intensive than defaulting to the annual or standard goals, there is no option to avoid meeting the narrow tailoring standard.

3. Ensure Flexibility of Goals and Requirements

It is imperative that remedies not operate as fixed quotas.¹³⁶ A race- and gender-conscious program must provide for contract awards to firms who fail to meet the contract goals but make good faith efforts to do so.¹³⁷ In *Croson*, the Court refers approvingly to the contract-by-contract waivers used in the USDOT’s DBE program.¹³⁸ This feature has been central to the holding that the

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

132. See *Engineering Contractors II*, 122 F.3d at 900 (separate goals for Blacks, Hispanics and women).

133. *Sherbrooke*, 345 F.3d. at 972.

134. *BAGC v. Chicago*, 298 F. Supp.2d at 740 (City’s MBE and WBE goals were “formulistic” percentages not related to the availability of firms).

135. See *Sherbrooke*, 345 F.3d at 972; *Coral Construction*, 941 F.2d at 924.

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

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

DBE program meets the narrow tailoring requirement.¹³⁹ Further, firms that meet the goals cannot be favored over those who made good faith efforts and firms that exceed the goals cannot be favored over those that did not exceed the goals.

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

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

The groups to include must be based upon the evidence.¹⁴⁰ The “random inclusion” of ethnic or racial groups that may never have experienced discrimination in the entity’s market area may indicate impermissible “racial politics”.¹⁴¹ In striking down Cook County, Illinois’ construction program, the Seventh Circuit remarked that a “state or local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian-Americans and women.”¹⁴² However, at least one court has held some quantum of evidence of discrimination for each group is sufficient; *Croson* does not require that each group included in the ordinance suffer equally from discrimination.¹⁴³ Therefore, remedies should be limited to those firms owned by the relevant minority groups, as established by the evidence, that have suffered actual harm in the market area.¹⁴⁴

Next, the firm’s owner(s) must be disadvantaged. The DBE Program’s rebuttable presumptions of social and economic disadvantage, including the requirement that the disadvantaged owner’s personal net worth not exceed a certain ceiling and that the firm meet the Small Business Administration’s size definitions for its industry, have been central to the courts’ holdings that it is narrowly tailored.¹⁴⁵ “[W]ealthy minority owners and wealthy minority-owned

138. *Croson*, 488 U.S. at 508; see also *Adarand VII*, 228 F.3d at 1181.

139. See, e.g., *Sherbrooke*, 345 F.3d. at 972; *Webster*, 51 F. Supp. 2d at 1354, 1380.

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

141. *Webster*, 51 F.Supp.2d at 1380-1381.

142. *Builders Association of Greater Chicago v. County of Cook*, 256 F.3d 642, 646 (7th Cir. 2001) (“*Cook II*”).

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

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

firms are excluded, and certification is available to persons who are not presumptively [socially] disadvantaged but can demonstrate actual social and economic disadvantage. Thus, race is made relevant in the program, but it is not a determinative factor.”¹⁴⁶ Further, anyone must be able to challenge the disadvantaged status of any firm.¹⁴⁷ The certifications accepted by a local program must meet these criteria.

5. Evaluate the Burden on Third Parties

Failure to make “neutral” changes to contracting and procurement policies and procedures that disadvantage M/WBEs and other small businesses may result in a finding that the program unduly burdens non-M/WBEs.¹⁴⁸ However, “innocent” parties can be made to share some of the burden of the remedy for eradicating racial discrimination.¹⁴⁹ The burden of compliance need not be placed only upon those firms directly responsible for the discrimination. The proper focus is whether the burden on third parties is “too intrusive” or “unacceptable”. As described by the court in upholding the Illinois Tollway’s program for non-federally assisted contracts,

[t]he Court reiterates that setting goals as a percentage of total contract dollars does not demonstrate an undue burden on non-DBE subcontractors. The Tollway’s method of goal setting is identical to that prescribed by the Federal Regulations, which this Court has already found to be supported by “strong policy reasons” [citation omitted].... Here, where the Tollway Defendants have provided persuasive evidence of discrimination in the Illinois road construction industry, the Court finds the Tollway Program’s burden on non-DBE subcontractors to be permissible.¹⁵⁰

Burdens must be proven and cannot constitute mere speculation by a plaintiff.¹⁵¹ “Implementation of the race-conscious contracting goals for which [the

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

146. *Sherbrooke*, 345 F.3d. at 973.

147. 49 C.F.R. §26.87.

148. *See Engineering Contractors I*, 943 F. Supp. at 1581-1582. (County chose not to change its procurement system).

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

150. *Midwest Fence I*, 84 F. Supp. 3d at 739.

federal authorizing legislation] provides will inevitably result in bids submitted by non-DBE firms being rejected in favor of higher bids from DBEs. Although the result places a very real burden on non-DBE firms, this fact alone does not invalidate [the statute]. If it did, all affirmative action programs would be unconstitutional because of the burden upon non-minorities.”¹⁵²

Narrow tailoring does permit certified firms acting as prime contractors to count their self-performance towards meeting contract goals, if the study finds discriminatory barriers to prime contract opportunities and there is no requirement that a program be limited only to the subcontracting portions of contracts. The DBE program regulations provide this remedy for discrimination against DBEs seeking prime work,¹⁵³ and the regulations do not limit the application of the program to only subcontracts.¹⁵⁴ The trial court in upholding the Illinois DOT’s DBE program explicitly recognized that barriers to subcontracting opportunities also affect the ability of DBEs to compete for prime work on a fair basis.

This requirement that goals be applied to the value of the entire contract, not merely the subcontracted portion(s), is not altered by the fact that prime contracts are, by law, awarded to the lowest bidder. While it is true that prime contracts are awarded in a race- and gender-neutral manner, the Regulations nevertheless mandate application of goals based on the value of the entire contract. Strong policy reasons support this approach. Although laws mandating award of prime contracts to the lowest bidder remove concerns regarding direct discrimination at the level of prime contracts, the indirect effects of discrimination may linger. The ability of DBEs to compete successfully for prime contracts may be indirectly affected by discrimination in the subcontracting market, or in the bonding and financing markets. Such discrimination is particularly burdensome in the construction industry, a highly competitive industry with tight profit margins, considerable hazards, and strict bonding and insurance requirements.¹⁵⁵

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

152. *Western States*, 407 F.3d at 995.

153. 49 C.F.R. §26.53(g) (“In determining whether a DBE bidder/offeror for a prime contract has met the contractor goal, count the work the DBE has committed to perform with its own forces as well as the work that it has committed to be performed by DBE subcontractors and suppliers.”).

154. 49 C.F.R. §26.45(a)(1).

155. *Northern Contracting II*, 2005 U.S. Dist. LEXIS 19868 at 74.

6. Review the Duration of the Program

Race-based programs must have durational limits. A race-based remedy must “not last longer than the discriminatory effects it is designed to eliminate.”¹⁵⁶ The unlimited duration and lack of review were factors in the court’s holding that the City of Chicago’s M/WBE construction program was no longer narrowly tailored; Chicago’s program was based on 14-year-old information which, while it supported the program adopted in 1990, no longer was sufficient standing alone to justify the City’s efforts in 2004.¹⁵⁷ How old is too old is not definitively answered,¹⁵⁸ but governments would be wise to analyze data at least once every five or six years.

In contrast, the USDOT DBE program’s periodic review by Congress has been repeatedly held to provide adequate durational limits.^{159, 160} Similarly, “two facts [were] particularly compelling in establishing that [North Carolina’s M/WBE program] was narrowly tailored: the statute’s provisions (1) setting a specific expiration date and (2) requiring a new disparity study every five years.”¹⁶¹

156. *Adarand III*, 515 U.S. at 238.

157. *BAGC v. Chicago*, 298 F.Supp.2d at 739.

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

159. *See Western States*, 407 F.3d at 995.

160. *See Fixing America’s Surface Transportation (“FAST”) Act*, Pub. L. No. 114-94 (2015).

161. *H.B. Rowe*, 615 F.3d at 253.

III. CONTRACT DATA ANALYSIS FOR CENTRAL HEALTH

A. Contract Data Overview

We analyzed contract data for 2013 through 2019 for the Travis County Healthcare District (“Central Health”). In order to conduct the analysis, we constructed all the fields necessary for our analysis where they were missing in the agency’s contract records (e.g., industry type; zip codes; six-digit North American Industry Classification System (“NAICS”) codes of prime contractors and subcontractors; Minority- and Woman-owned Business Enterprise (“M/WBE”) status). This work resulted in the Final Contract Data File (“FCDF”). Tables 3-1 through 3-2 provide data on the FCDF.

Table 3-1: Final Contract Data File

Contract Type	Total Contracts	Share of Total Contracts
Prime Contracts	103	56.6%
Subcontracts	79	43.4%
TOTAL	182	100.0%

Source: CHA analysis of Central Health data

Table 3-2: Final Contract Data File Net Dollar Value

Contract Type	Total Contract Dollars	Share of Total Contract Dollars
Prime Contracts	\$30,959,298	68.0%
Subcontracts	\$14,550,222	32.0%
TOTAL	\$45,509,520	100.0%

Source: CHA analysis of Central Health data

Sections B through F present our analysis of Central Health’s contracts. First, we determined the geographic and product markets for the analysis. Next, we estimated the utilization of M/WBEs by Central Health. Third, we used the FCDF, in

combination with other databases (as described below), to calculate M/WBE unweighted and weighted availability in Central Health’s marketplace. Finally, we analyzed whether there are any disparities between Central Health’s utilization of M/WBEs and M/WBE weighted availability.

B. Central Health’s Geographic and Product Market

As discussed in Chapter II, the federal courts¹⁶² require that a government agency narrowly tailor its race- and gender-conscious contracting program elements to its geographic market area. This element of the analysis must be empirically established.¹⁶³ The accepted approach is to analyze those detailed industries, as defined by six-digit NAICS codes,¹⁶⁴ that make up at least 75% of the prime contract and subcontract payments for the study period.¹⁶⁵ The determination of Central Health’s geographic and product market requires three steps:

1. Developing the Final Contract Data File to determine the product market.
2. Identifying the geographic market.
3. Determining the product market given the geographic parameters.

Table 3-3 lists all of the NAICS codes in the Final Contract Data File. Table 3-4 identifies Central Health’s geographic market. This step of identifying the geographic market imposes a spatial constraint on this data set. Having established the geographic market, we determined the product market by constraining the FCDF by this spatial parameter. Table 3-5 presents these results.

1. Central Health’s Final Contract Data File

The FCDF, which establishes Central Health’s product market, consists of 55 NAICS codes with a total contract dollar value of \$45,509,520. Table 3-3 presents each NAICS code with its share of the total contract dollar value. The NAICS codes are presented from the code with the largest share to the smallest share.

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162. *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 508 (1989) (Richmond was specifically faulted for including minority contractors from across the country in its program based on the national evidence that supported the USDOT DBE program); see 49 C.F.R. §26.45(c); <https://www.transportation.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise> (“D. Explain How You Determined Your Local Market Area... your local market area is the area in which the substantial majority of the contractors and subcontractors with which you do business are located and the area in which you spend the substantial majority of your contracting dollars.”).
 163. *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994) (to confine data to strict geographic boundaries would ignore “economic reality”).
 164. www.census.gov/eos/www/naics.
 165. J. Wainwright and C. Holt, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*, National Academies of Sciences, Engineering, and Medicine, 2010, at p. 29, (“*National Disparity Study Guidelines*”).

Table 3-3: Industry Percentage Distribution of Central Health Contracts by Dollars

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
238220	Plumbing, Heating, and Air-Conditioning Contractors	10.9%	10.9%
541110	Offices of Lawyers	10.1%	21.0%
541820	Public Relations Agencies	8.7%	29.7%
541611	Administrative Management and General Management Consulting Services	5.7%	35.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	5.5%	40.8%
518210	Data Processing, Hosting, and Related Services	5.3%	46.1%
541310	Architectural Services	5.0%	51.1%
238910	Site Preparation Contractors	4.9%	56.0%
236220	Commercial and Institutional Building Construction	4.8%	60.9%
561210	Facilities Support Services	3.6%	64.5%
561612	Security Guards and Patrol Services	3.4%	67.9%
238310	Drywall and Insulation Contractors	2.6%	70.5%
238350	Finish Carpentry Contractors	2.3%	72.9%
541840	Media Representatives	2.2%	75.1%
541613	Marketing Consulting Services	2.2%	77.3%
541320	Landscape Architectural Services	2.1%	79.4%
562910	Remediation Services	1.9%	81.3%
323111	Commercial Printing (except Screen and Books)	1.5%	82.8%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	1.4%	84.2%
541612	Human Resources Consulting Services	1.4%	85.6%
541330	Engineering Services	1.0%	86.5%
561720	Janitorial Services	0.9%	87.4%
541511	Custom Computer Programming Services	0.9%	88.3%
541620	Environmental Consulting Services	0.9%	89.2%
511210	Software Publishers	0.8%	90.1%
237310	Highway, Street, and Bridge Construction	0.8%	90.9%

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NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
561320	Temporary Help Services	0.7%	91.6%
541990	All Other Professional, Scientific, and Technical Services	0.7%	92.2%
336112	Light Truck and Utility Vehicle Manufacturing	0.6%	92.8%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	0.6%	93.4%
238320	Painting and Wall Covering Contractors	0.5%	94.0%
238160	Roofing Contractors	0.5%	94.5%
238130	Framing Contractors	0.5%	95.0%
237130	Power and Communication Line and Related Structures Construction	0.5%	95.5%
561312	Executive Search Services	0.4%	95.9%
238390	Other Building Finishing Contractors	0.4%	96.3%
541910	Marketing Research and Public Opinion Polling	0.4%	96.7%
238330	Flooring Contractors	0.4%	97.1%
238990	All Other Specialty Trade Contractors	0.3%	97.4%
238340	Tile and Terrazzo Contractors	0.3%	97.7%
561730	Landscaping Services	0.3%	98.0%
541211	Offices of Certified Public Accountants	0.3%	98.3%
238150	Glass and Glazing Contractors	0.3%	98.6%
541370	Surveying and Mapping (except Geophysical) Services	0.3%	98.9%
512110	Motion Picture and Video Production	0.2%	99.1%
238190	Other Foundation, Structure, and Building Exterior Contractors	0.2%	99.2%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.2%	99.4%
541618	Other Management Consulting Services	0.2%	99.6%
238120	Structural Steel and Precast Concrete Contractors	0.2%	99.7%
238290	Other Building Equipment Contractors	0.1%	99.8%
541430	Graphic Design Services	0.1%	99.9%
541690	Other Scientific and Technical Consulting Services	0.1%	99.9%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
541810	Advertising Agencies	0.04%	100.0%
237990	Other Heavy and Civil Engineering Construction	0.04%	100.0%
561492	Court Reporting and Stenotype Services	0.004%	100.0%
TOTAL		100.0%	

Source: CHA analysis of Central Health data

2. Central Health’s Geographic Market

Firm location was determined by zip code and aggregated into counties as the geographic unit. Contracts awarded to firms located in the State of Texas accounted for 89.2% of all dollars during the study period. The two counties within the Austin metropolitan area – Travis and Williamson – captured 83.1% of the dollars spent in the State of Texas and 74.2% of the entire FCDF. Therefore, these two counties were determined to be the geographic market for Central Health, and we limited our analysis to firms in these counties. Table 3-4 presents the county distribution of the State of Texas contract dollars.

Table 3-4: County Distribution of Contract Dollars within the State of Texas

County	Pct Total Contract Dollars
Travis County	72.6%
Williamson County	10.5%
Comal County	4.6%
Dallas County	4.3%
Harris County	1.8%
Bexar County	1.8%
Galveston County	1.2%
Tom Green County	1.2%
Angelina County	0.7%
Kendall County	0.6%
Guadalupe County	0.4%
Collin County	0.1%
Hays County	0.1%
Gillespie County	0.1%

County	Pct Total Contract Dollars
Fort Bend County	0.03%
McLennan County	0.03%
Caldwell County	0.01%
TOTAL	100.0%

Source: CHA analysis of Central Health data

C. Central Health’s Utilization of M/WBEs in its Geographic and Product Market

Having determined Central Health’s geographic market area, the next step was to determine the dollar value of Central Health’s utilization of M/WBEs¹⁶⁶ as measured by net payments to prime firms and subcontractors and disaggregated by race and gender. There were 45 NAICS codes after constraining the FCDF by the geographic market; the dollar value of the contracts in these codes was \$33,761,650. Table 3-5 presents these data. We note that the contract dollar shares in Table 3-5 are equivalent to the weight of spending in each NAICS code. These data were used to calculate weighted availability¹⁶⁷ from unweighted availability, as discussed below.

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

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

Table 3-5: NAICS Code Distribution of Contract Dollars in Central Health’s Product Market when Constrained by its Geographic Market

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$4,933,933	14.6%
541110	Offices of Lawyers	\$4,489,999	13.3%
541820	Public Relations Agencies	\$3,182,604	9.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$2,484,738	7.4%
518210	Data Processing, Hosting, and Related Services	\$2,391,784	7.1%
236220	Commercial and Institutional Building Construction	\$2,203,274	6.5%
541310	Architectural Services	\$2,061,575	6.1%
561210	Facilities Support Services	\$1,659,114	4.9%
561612	Security Guards and Patrol Services	\$1,544,968	4.6%
238310	Drywall and Insulation Contractors	\$1,201,430	3.6%
562910	Remediation Services	\$887,153	2.6%
541613	Marketing Consulting Services	\$764,730	2.3%
541320	Landscape Architectural Services	\$713,933	2.1%
323111	Commercial Printing (except Screen and Books)	\$660,376	2.0%
541611	Administrative Management and General Management Consulting Services	\$541,200	1.6%
541330	Engineering Services	\$440,058	1.3%
237310	Highway, Street, and Bridge Construction	\$355,534	1.1%
541511	Custom Computer Programming Services	\$348,811	1.0%
561320	Temporary Help Services	\$319,661	0.9%
238910	Site Preparation Contractors	\$259,887	0.8%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	\$258,510	0.8%
238320	Painting and Wall Covering Contractors	\$247,319	0.7%
237130	Power and Communication Line and Related Structures Construction	\$213,975	0.6%
238330	Flooring Contractors	\$173,409	0.5%

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NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
238340	Tile and Terrazzo Contractors	\$135,615	0.4%
541840	Media Representatives	\$134,116	0.4%
541211	Offices of Certified Public Accountants	\$130,000	0.4%
238150	Glass and Glazing Contractors	\$127,945	0.4%
541370	Surveying and Mapping (except Geophysical) Services	\$125,608	0.4%
561720	Janitorial Services	\$112,982	0.3%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$95,889	0.3%
238990	All Other Specialty Trade Contractors	\$93,336	0.3%
512110	Motion Picture and Video Production	\$84,888	0.3%
561730	Landscaping Services	\$80,969	0.2%
541618	Other Management Consulting Services	\$75,553	0.2%
238390	Other Building Finishing Contractors	\$44,064	0.1%
541910	Marketing Research and Public Opinion Polling	\$34,650	0.1%
238120	Structural Steel and Precast Concrete Contractors	\$34,396	0.1%
541430	Graphic Design Services	\$29,080	0.1%
541690	Other Scientific and Technical Consulting Services	\$23,550	0.1%
541810	Advertising Agencies	\$19,015	0.1%
237990	Other Heavy and Civil Engineering Construction	\$16,256	0.05%
238290	Other Building Equipment Contractors	\$14,152	0.04%
541614	Process, Physical Distribution, and Logistics Consulting Services	\$10,000	0.03%
561492	Court Reporting and Stenotype Services	\$1,611	0.005%
TOTAL		\$33,761,650	100.0%

Source: CHA analysis of Central Health data

D. Central Health’s Utilization of M/WBEs in its Geographic and Product Market

Table 3-6 presents the distribution of each NAICS code’s contract dollars across the relevant demographic groups. Table 3-7 indicates each demographic group's share of all spending in the particular NAICS code.

Table 3-6: Distribution of Contract Dollars by Race and Gender
(total dollars)

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
236220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,203,274	\$2,203,274
237130	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$213,975	\$213,975
237310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$355,534	\$355,534
237990	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,256	\$16,256
238120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,396	\$34,396
238150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$127,945	\$127,945
238210	\$0	\$0	\$0	\$0	\$0	\$723,977	\$723,977	\$1,760,761	\$2,484,738
238220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,933,933	\$4,933,933
238290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,152	\$14,152
238310	\$0	\$0	\$0	\$0	\$0	\$133,376	\$133,376	\$1,068,054	\$1,201,430
238320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,319	\$247,319
238330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$173,409	\$173,409
238340	\$0	\$0	\$0	\$0	\$0	\$135,615	\$135,615	\$0	\$135,615
238390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,064	\$44,064
238910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$259,887	\$259,887
238990	\$0	\$0	\$10,900	\$0	\$10,900	\$82,436	\$93,336	\$0	\$93,336

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
323111	\$0	\$660,376	\$0	\$0	\$660,376	\$0	\$660,376	\$0	\$660,376
423450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95,889	\$95,889
423620	\$0	\$0	\$258,510	\$0	\$258,510	\$0	\$258,510	\$0	\$258,510
512110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,888	\$84,888
518210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,391,784	\$2,391,784
541110	\$362,229	\$0	\$0	\$0	\$362,229	\$250,060	\$612,289	\$3,877,710	\$4,489,999
541211	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130,000	\$130,000
541310	\$0	\$135,403	\$0	\$0	\$135,403	\$1,716,148	\$1,851,551	\$210,023	\$2,061,574
541320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$713,933	\$713,933
541330	\$0	\$0	\$68,500	\$0	\$68,500	\$0	\$68,500	\$371,558	\$440,058
541370	\$0	\$0	\$0	\$0	\$0	\$52,402	\$52,402	\$73,206	\$125,608
541430	\$0	\$0	\$0	\$0	\$0	\$29,080	\$29,080	\$0	\$29,080
541511	\$0	\$0	\$0	\$0	\$0	\$109,582	\$109,582	\$239,229	\$348,811
541611	\$0	\$0	\$0	\$0	\$0	\$64,000	\$64,000	\$477,200	\$541,200
541613	\$0	\$593,919	\$0	\$0	\$593,919	\$170,811	\$764,730	\$0	\$764,730
541614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$10,000
541618	\$63,435	\$0	\$0	\$0	\$63,435	\$0	\$63,435	\$12,118	\$75,553
541690	\$0	\$0	\$0	\$0	\$0	\$23,550	\$23,550	\$0	\$23,550
541810	\$0	\$19,015	\$0	\$0	\$19,015	\$0	\$19,015	\$0	\$19,015
541820	\$0	\$300,000	\$14,088	\$0	\$314,088	\$1,586,598	\$1,900,686	\$1,281,919	\$3,182,604
541840	\$0	\$134,116	\$0	\$0	\$134,116	\$0	\$134,116	\$0	\$134,116
541910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,650	\$34,650
561210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,659,114	\$1,659,114

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
561320	\$0	\$0	\$0	\$0	\$0	\$319,661	\$319,661	\$0	\$319,661
561492	\$0	\$0	\$1,611	\$0	\$1,611	\$0	\$1,611	\$0	\$1,611
561612	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,544,968	\$1,544,968
561720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,982	\$112,982
561730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,969	\$80,969
562910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$887,153	\$887,153
Total	\$425,664	\$1,842,829	\$353,609	\$0	\$2,622,102	\$5,397,296	\$8,019,398	\$25,742,252	\$33,761,650

Source: CHA analysis of Central Health data

**Table 3-7: Distribution of Contract Dollars by Race and Gender
(share of total dollars)**

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
236220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238120	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238150	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238210	0.0%	0.0%	0.0%	0.0%	0.0%	29.1%	29.1%	70.9%	100.0%
238220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238290	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238310	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	11.1%	88.9%	100.0%
238320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

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NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
238330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238340	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
238390	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238990	0.0%	0.0%	11.7%	0.0%	11.7%	88.3%	100.0%	0.0%	100.0%
323111	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
423450	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423620	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
512110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541110	8.1%	0.0%	0.0%	0.0%	8.1%	5.6%	13.6%	86.4%	100.0%
541211	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541310	0.0%	6.6%	0.0%	0.0%	6.6%	83.2%	89.8%	10.2%	100.0%
541320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541330	0.0%	0.0%	15.6%	0.0%	15.6%	0.0%	15.6%	84.4%	100.0%
541370	0.0%	0.0%	0.0%	0.0%	0.0%	41.7%	41.7%	58.3%	100.0%
541430	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541511	0.0%	0.0%	0.0%	0.0%	0.0%	31.4%	31.4%	68.6%	100.0%
541611	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	11.8%	88.2%	100.0%
541613	0.0%	77.7%	0.0%	0.0%	77.7%	22.3%	100.0%	0.0%	100.0%
541614	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541618	84.0%	0.0%	0.0%	0.0%	84.0%	0.0%	84.0%	16.0%	100.0%
541690	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541810	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541820	0.0%	9.4%	0.4%	0.0%	9.9%	49.9%	59.7%	40.3%	100.0%
541840	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
541910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561320	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
561492	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
561612	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
562910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
TOTAL	1.3%	5.5%	1.0%	0.0%	7.8%	16.0%	23.8%	76.2%	100.0%

Source: CHA analysis of Central Health data

E. The Availability of M/WBEs in Central Health’s Geographic and Product Market

1. The Methodological Framework

Estimates of the availability of M/WBEs in Central Health’s geographic and product market are a critical component of Central Health’s compliance with its constitutional obligations to ensure its program is narrowly tailored. As discussed in Chapter II, the courts require that the availability estimates reflect the number of “ready, willing and able” firms that can perform on specific types of work involved in the recipient’s prime contracts and associated sub-contracts; general population is legally irrelevant. Availability estimates are also crucial should Central Health determine it has a sufficient evidentiary basis to adopt annual M/WBE targets and to set narrowly tailored contract goals.

To examine whether M/WBEs are receiving full opportunities on Central Health contracts, these narrowly tailored availability estimates were compared to the utilization percentage of dollars received by M/WBEs, discussed below in Section F.

We applied the “custom census” approach, with refinements, to estimating availability, discussed in Chapter II. Using this framework, CHA utilized three databases to estimate availability:

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

First, we eliminated any duplicate entries in the geographically constrained FCDF. Some firms received multiple contracts for work performed in the same NAICS codes. Without this elimination of duplicate listings, the availability

database would be artificially large. This list of unique firms comprised the first component of the Study's availability determination.

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

We next developed a custom database from Hoovers, a Dun & Bradstreet company, for minority- and woman-owned firms and non-M/WBEs. Hoovers maintains a comprehensive, extensive and regularly updated listing of all firms conducting business. The database includes a vast amount of information on each firm, including location and detailed industry codes, and is the broadest publicly available data source for firm information. We purchased the information from Hoovers for the firms in the NAICS codes located in Central Health's market area in order to form our custom Dun & Bradstreet/Hoovers Database. In the initial download, the data from Hoovers simply identified a firm as being minority-owned.¹⁶⁸ However, the company does keep detailed information on ethnicity (*i.e.*, is the minority firm owner Black, Hispanic, Asian, or Native American). We obtained this additional information from Hoovers by special request.

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

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

2. The Availability Data and Results

Tables 3-8 through 3-10 present data on:

1. The unweighted availability percentages by race and gender and by NAICS codes for Central Health's product market (Table 3-8);

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

2. The weights used to adjust the unweighted numbers (Table 3-9);¹⁶⁹ and
3. The final estimates of the weighted averages of the individual six-digit level NAICS availability estimates in Central Health’s market area (Table 3-10).

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

Second, weighting also reflects the importance of the availability of a demographic group in a particular NAICS code, that is, how important that NAICS code is to Central Health’s contracting patterns. For example, in a hypothetical NAICS Code 123456, if the total available firms are 100 and 60 of these firms are M/WBEs; hence, M/WBE availability would be 60%. However, if Central Health spends only one percent of its contract dollars in this NAICS code, then this high availability would be offset by the low level of spending in that NAICS code. In contrast, if Central Health spent 25% of its contract dollars in NAICS Code 123456, then the same availability would carry a greater weight.

To calculate the weighted availability for each NAICS code, we first determined the unweighted availability for each demographic group in each NAICS code (presented in Table 3-8). In the previous example, the unweighted availability for M/WBEs in NAICS Code 123456 is 60%. We then multiplied the unweighted availability by the share of Central Health spending in that NAICS code presented in Table 3-9. This share is the *weight*. Using the previous example, where Central Health spending in NAICS Code 123456 was one percent, the component of M/WBE weighted availability for NAICS Code 123456 would be 0.006: 60% multiplied by one percent.

We performed this calculation for each NAICS code and then summed all of the individual components for each demographic group to determine the weighted availability for that group. The results of this calculation are presented in Table 3-10.

169. These weights are equivalent to the share of contract dollars presented in the previous section.

Table 3-8: Unweighted M/WBE Availability for Central Health Contracts

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE	Total
236220	3.3%	7.2%	1.9%	0.7%	13.2%	10.7%	23.9%	76.1%	100.0%
237130	0.0%	15.2%	0.0%	0.0%	15.2%	12.1%	27.3%	72.7%	100.0%
237310	3.3%	14.1%	1.5%	0.9%	19.8%	8.4%	28.2%	71.8%	100.0%
237990	2.2%	12.9%	3.2%	0.0%	18.3%	5.4%	23.7%	76.3%	100.0%
238120	0.0%	16.3%	6.1%	2.0%	24.5%	14.3%	38.8%	61.2%	100.0%
238150	1.7%	3.4%	0.0%	0.0%	5.1%	6.8%	11.9%	88.1%	100.0%
238210	0.4%	2.7%	0.6%	0.2%	3.9%	5.2%	9.1%	90.9%	100.0%
238220	0.4%	1.7%	0.5%	0.0%	2.6%	2.4%	5.0%	95.0%	100.0%
238290	2.7%	2.7%	0.0%	2.7%	8.1%	5.4%	13.5%	86.5%	100.0%
238310	0.3%	3.1%	0.6%	0.3%	4.2%	4.5%	8.8%	91.2%	100.0%
238320	0.1%	2.2%	0.1%	0.2%	2.7%	1.6%	4.3%	95.7%	100.0%
238330	1.0%	4.8%	1.9%	0.0%	7.6%	5.7%	13.3%	86.7%	100.0%
238340	1.0%	0.5%	0.5%	0.5%	2.6%	4.2%	6.8%	93.2%	100.0%
238390	0.5%	2.5%	1.0%	0.5%	4.5%	3.0%	7.5%	92.5%	100.0%
238910	0.9%	6.8%	1.4%	0.0%	9.0%	8.1%	17.2%	82.8%	100.0%
238990	0.3%	2.1%	0.2%	0.1%	2.7%	2.9%	5.5%	94.5%	100.0%
323111	0.2%	0.4%	0.9%	0.0%	1.5%	9.6%	11.1%	88.9%	100.0%
423450	3.3%	4.9%	1.6%	0.0%	9.8%	9.3%	19.1%	80.9%	100.0%
423620	2.4%	0.0%	2.4%	0.0%	4.8%	4.8%	9.5%	90.5%	100.0%
512110	0.5%	2.1%	0.3%	0.0%	2.9%	5.3%	8.3%	91.7%	100.0%
518210	0.9%	2.7%	2.4%	0.0%	6.0%	8.1%	14.1%	85.9%	100.0%
541110	0.2%	0.5%	0.1%	0.0%	0.8%	4.8%	5.6%	94.4%	100.0%
541211	0.6%	0.5%	0.1%	0.0%	1.2%	5.9%	7.2%	92.8%	100.0%
541310	1.3%	3.5%	1.4%	0.3%	6.6%	11.4%	17.9%	82.1%	100.0%
541320	0.0%	1.5%	0.5%	0.0%	1.9%	4.4%	6.3%	93.7%	100.0%
541330	1.7%	6.1%	4.6%	0.1%	12.5%	7.9%	20.3%	79.7%	100.0%
541370	3.0%	8.1%	1.0%	1.5%	13.6%	18.7%	32.3%	67.7%	100.0%
541430	0.7%	1.2%	1.0%	0.0%	2.9%	20.5%	23.4%	76.6%	100.0%
541511	0.9%	1.2%	3.4%	0.1%	5.6%	4.5%	10.1%	89.9%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE	Total
541611	2.1%	1.5%	0.8%	0.2%	4.5%	7.2%	11.7%	88.3%	100.0%
541613	0.9%	0.8%	0.5%	0.0%	2.1%	4.3%	6.4%	93.6%	100.0%
541614	14.6%	4.9%	4.9%	0.0%	24.4%	7.3%	31.7%	68.3%	100.0%
541618	0.5%	0.6%	0.3%	0.0%	1.5%	3.0%	4.5%	95.5%	100.0%
541690	3.0%	2.8%	2.0%	0.0%	7.7%	8.9%	16.6%	83.4%	100.0%
541810	0.6%	3.0%	0.3%	0.0%	3.8%	10.9%	14.8%	85.2%	100.0%
541820	3.1%	3.4%	1.0%	0.0%	7.5%	16.3%	23.7%	76.3%	100.0%
541840	0.0%	6.3%	0.0%	0.0%	6.3%	0.0%	6.3%	93.8%	100.0%
541910	1.5%	3.7%	0.7%	0.0%	6.0%	13.1%	19.1%	80.9%	100.0%
561210	0.0%	6.7%	4.4%	2.2%	13.3%	6.7%	20.0%	80.0%	100.0%
561320	1.7%	4.7%	5.6%	0.4%	12.4%	10.3%	22.7%	77.3%	100.0%
561492	0.0%	0.0%	1.9%	1.9%	3.8%	39.6%	43.4%	56.6%	100.0%
561612	3.3%	2.2%	0.0%	0.0%	5.6%	4.4%	10.0%	90.0%	100.0%
561720	2.0%	2.4%	0.3%	0.1%	4.7%	4.5%	9.2%	90.8%	100.0%
561730	1.1%	1.5%	0.2%	0.1%	2.8%	2.7%	5.5%	94.5%	100.0%
562910	0.0%	16.7%	0.0%	0.0%	16.7%	33.3%	50.0%	50.0%	100.0%
Total	0.9%	1.9%	0.9%	0.1%	3.8%	5.1%	8.9%	91.1%	100.0%

Source: CHA analysis of Central Health data; Hoovers; CHA Master Directory

Table 3-9: Distribution of Central Health Spending by NAICS Code (the Weights)

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
236220	Commercial and Institutional Building Construction	6.5%
237130	Power and Communication Line and Related Structures Construction	0.6%
237310	Highway, Street, and Bridge Construction	1.1%
237990	Other Heavy and Civil Engineering Construction	0.05%
238120	Structural Steel and Precast Concrete Contractors	0.1%
238150	Glass and Glazing Contractors	0.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	7.4%
238220	Plumbing, Heating, and Air-Conditioning Contractors	14.6%

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NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
238290	Other Building Equipment Contractors	0.04%
238310	Drywall and Insulation Contractors	3.6%
238320	Painting and Wall Covering Contractors	0.7%
238330	Flooring Contractors	0.5%
238340	Tile and Terrazzo Contractors	0.4%
238390	Other Building Finishing Contractors	0.1%
238910	Site Preparation Contractors	0.8%
238990	All Other Specialty Trade Contractors	0.3%
323111	Commercial Printing (except Screen and Books)	2.0%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.3%
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	0.8%
512110	Motion Picture and Video Production	0.3%
518210	Data Processing, Hosting, and Related Services	7.1%
541110	Offices of Lawyers	13.3%
541211	Offices of Certified Public Accountants	0.4%
541310	Architectural Services	6.1%
541320	Landscape Architectural Services	2.1%
541330	Engineering Services	1.3%
541370	Surveying and Mapping (except Geophysical) Services	0.4%
541430	Graphic Design Services	0.1%
541511	Custom Computer Programming Services	1.0%
541611	Administrative Management and General Management Consulting Services	1.6%
541613	Marketing Consulting Services	2.3%
541614	Process, Physical Distribution, and Logistics Consulting Services	0.03%
541618	Other Management Consulting Services	0.2%
541690	Other Scientific and Technical Consulting Services	0.1%
541810	Advertising Agencies	0.1%
541820	Public Relations Agencies	9.4%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
541840	Media Representatives	0.4%
541910	Marketing Research and Public Opinion Polling	0.1%
561210	Facilities Support Services	4.9%
561320	Temporary Help Services	0.9%
561492	Court Reporting and Stenotype Services	0.005%
561612	Security Guards and Patrol Services	4.6%
561720	Janitorial Services	0.3%
561730	Landscaping Services	0.2%
562910	Remediation Services	2.6%
TOTAL		100.0%

Source: CHA analysis of Central Health data

Table 3-10 presents the weighted availability results for each of the racial and gender categories. The aggregated availability of M/WBEs, weighted by Central Health’s spending in its geographic and industry markets, is 13.7% for Central Health’s contracts. This overall, weighted M/WBE availability results can be used by Central Health to determine its overall, annual aspirational M/WBE goal.

Table 3-10: Aggregated Weighted Availability for Central Health Contracts

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
1.2%	3.4%	1.1%	0.2%	5.9%	7.8%	13.7%	86.3%	100.0%

Source: CHA analysis of Central Health data; Hoovers; CHA Master Directory

3. Analysis of the Concentration of Contract Dollars Among Firms

In addition to examining M/WBE and non-M/WBE contract dollar utilization, another important dimension to a disparity analysis is the concentration of contract dollars among M/WBE and non-M/WBE firms. This approach is important because the success of a group in receiving contract dollars may be caused by an unusual amount of dollars concentrated among a few firms. If that is the case, then a race- or gender-based remedial program may still be supportable even though a few firms have been able to overcome discriminatory barriers. This section presents data to examine this issue.

Prior to presenting these data, it is important to emphasize two important findings: 1) the three NAICS codes that represent the most contract dollars to each M/WBE group capture a larger share of the overall Central Health spending received by the group than the share of overall Central Health spending captured by the top three NAICS codes for Central Health; and 2) two of three NAICS codes that provide the most contract dollars to M/WBEs are different from the three NAICS codes that provide non-M/WBE firms their most contract dollars. In the case of Blacks, it is one of two codes.

With respect to the first finding, Table 3-11 presents data on the share of Central Health contract dollars received by the top three NAICS codes for each demographic group. These shares are derived from the data presented in Tables 3-7 and 3-8. The three NAICS codes where Central Health spent most of its contract dollars capture 37.3% of all Central Health spending. However, for each M/WBE group, the corresponding figure for the share of spending captured by the top three codes is approximately half of this: ranging between 100.0% (Blacks) and 74.6% (White Women). Native Americans did receive any contract dollars from Central Health.

Table 3-11: Comparison of the Share of Central Health Spending Captured by the Top Three NAICS Codes for Each Demographic Group

Demographic Group	Share of All Central Health Spending in the Top Three NAICS Codes for Each Group
All	37.3%
Black	100.0%
Hispanic	84.3%
Asian	96.5%
Native American	0.0%
White Woman	74.6%
Non-M/WBE	43.5%

Source: CHA analysis of Central Health data

With respect to the second finding, we conclude that the NAICS codes that are important to Central Health’s spending (*i.e.*, the largest weights) are not the same as the NAICS codes that are important for each M/WBE group (*i.e.*, the code’s contribution to the overall amount of contract dollars received by that M/WBE group). Table 3-12 provides more detail on the data presented in Table 3-11. The Table lists the top three codes for each group and their corre-

spending share of Central Health's spending; the Table also indicates the aggregate weight of those three codes. By comparing the leading codes for Central Health's overall spending to the leading codes for each M/WBE group, we see the differences. The code with the largest amount of Central Health's spending – NAICS code 238220 (Plumbing, Heating, and Air-Conditioning Contractors) – is not one of the top three codes for any M/WBE group. The code with the second largest amount of Central Health's spending - NAICS code 541110 (Offices of Lawyers) - is among the top three codes only for Blacks. The code with the third largest amount of Central Health spending – NAICS code 541820 (Public Relations Agencies) – is one of the top three codes for Hispanics, Asians, and White women. In addition, while the top three NAICS codes account for 37.3% of all Central Health spending, the top three NAICS codes for each M/WBE group is much larger than that:

- Blacks – two codes account for 100% of all contract dollars received by Black firms.
- Hispanics – the top three codes account for 84.3% of all contract dollars received by Hispanic firms.
- Asians – the top three codes account for 96.5% of all contract dollars received by Asian firms.
- White women – the top three codes account for 74.6% of all contract dollars received by White woman firms.

We can conclude that the NAICS codes that are important to Central Health's spending overall are different than the codes that are important to M/WBEs. In addition, the top codes for each M/WBE group are a much larger share of all contract dollars for the respective M/WBE group compared to the leading codes for Central Health's overall spending.

**Table 3-12: The Top Three Central Health Spending
NAICS Codes for Each Demographic Group**

NAICS	NAICS Code Label	WEIGHT	Total of Top 3 Codes
All			
238220	Plumbing, Heating, and Air-Conditioning Contractors	14.6%	37.3%
541110	Offices of Lawyers	13.3%	
541820	Public Relations Agencies	9.4%	
Black			
541110	Offices of Lawyers	85.1%	100.0%
541618	Other Management Consulting Services	14.9%	
Hispanic			
323111	Commercial Printing (except Screen and Books)	35.8%	84.3%
541613	Marketing Consulting Services	32.2%	
541820	Public Relations Agencies	16.3%	
Asian			
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	73.1%	96.5%
541330	Engineering Services	19.4%	
541820	Public Relations Agencies	4.0%	
White Woman			
541310	Architectural Services	31.8%	74.6%
541820	Public Relations Agencies	29.4%	
238210	Electrical Contractors and Other Wiring Installation Contractors	13.4%	
Non-M/WBE			
238220	Plumbing, Heating, and Air-Conditioning Contractors	19.2%	43.5%
541110	Offices of Lawyers	15.1%	
518210	Data Processing, Hosting, and Related Services	9.3%	

Source: CHA analysis of Central Health data

Tables 3-13 through 3-16 present more details on how Central Health spending varies across groups and within groups. These results illustrate the different levels of concentration of contract dollars among M/WBEs compared to

non-M/WBEs. For each demographic group, we re-state the three NAICS codes where the group receives the largest share of Central Health’s spending (first presented in Table 3-12). We next present the share of all group contract dollars and compare that share to the corresponding share received by non-M/WBEs.

Table 3-13 presents the only two NAICS codes where Black firms received any contract dollars. While these codes captured all Black contract dollars, the corresponding figure for non-M/WBEs was 15.1%. In particular, while Central Health only spent 13.3% of its dollars in NAICS code 541110, 85.1% of all Black contract dollars came from this code. This disproportionality was evident in the other code for Black firms: NAICS code 541618 contributed 14.9% to all Black contract dollars but just 0.2% to all Central Health spending.

Table 3-13: Three NAICS Codes where Black Firms Received the Most Spending

NAICS Code	NAICS Code Label	Weight	Share of Total Black Dollars	Share of Total Non-M/WBE Dollars
541110	Offices of Lawyers	13.3%	85.1%	15.1%
541618	Other Management Consulting Services	0.2%	14.9%	0.0%
Total 2-code Share of Total Group Dollars			100.0%	15.1%

Source: CHA analysis of Central Health data

Table 3-14 presents the three NAICS codes where Hispanic firms received the largest share of their contract dollars. While these codes comprised 84.3% of all Hispanic contract dollars, the corresponding figure for non-M/WBEs was 5.0%. In particular, while Central Health only spent 2.0% of its dollars in NAICS code 323111, 35.8% of all Hispanic contract dollars came from this code. This disproportionality was evident in the other two leading codes for Hispanic firms: NAICS code 541613 contributed 32.2% to all Hispanic contract dollars but only 2.3% to all Central Health spending; NAICS code 541820 contributed 16.3% to all Hispanic contract dollars but only 5.0% to all Central Health spending.

Table 3-14: Three NAICS Codes where Hispanic Firms Received the Most Spending

NAICS Code	NAICS Code Label	Weight	Share of Total Hispanic Dollars	Share of Total Non-M/WBE Dollars
323111	Commercial Printing (except Screen and Books)	2.0%	35.8%	0.0%
541613	Marketing Consulting Services	2.3%	32.2%	0.0%
541820	Public Relations Agencies	9.4%	16.3%	5.0%
Total 3-code Share of Total Group Dollars			84.3%	5.0%

Source: CHA analysis of Central Health data

Table 3-15 presents the three NAICS codes where Asian firms received the largest share of their contract dollars. While these codes captured 96.5% of all Asian contract dollars, the corresponding figure for non-M/WBEs was 6.4%. In particular, while Central Health only spent 0.8% of its dollars in NAICS code 423620, 73.1% of all Asian contract dollars came from this code. This disproportionality was evident in the second leading code for Asian firms: NAICS code 541330 contributed 19.4% to all Asian contract dollars but just 1.3% to all Central Health spending. This pattern was reversed in NAICS code 541820, which contributed 4.0% to all Asian contract dollars and 9.4% to all Central Health spending.

Table 3-15: Three NAICS Codes where Asian Firms Received the Most Spending

NAICS Code	NAICS Code Label	Weight	Share of Total Asian Dollars	Share of Total Non-M/WBE Dollars
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	0.8%	73.1%	0.0%
541330	Engineering Services	1.3%	19.4%	1.4%
541820	Public Relations Agencies	9.4%	4.0%	5.0%
Total 3-code Share of Total Group Dollars			96.5%	6.4%

Source: CHA analysis of Central Health data

Table 3-16 presents the three NAICS codes where White woman firms received the largest share of their contract dollars. While these codes capture 74.6% of all White woman contract dollars, the corresponding figure for non-M/WBEs

was 12.6%. In particular, while Central Health only spent 6.1% of its dollars in NAICS code 541310, 31.8% of all White woman contract dollars came from this code. This disproportionality was evident in the other two leading codes for White woman firms: NAICS code 541820 contributed 29.4% to all White woman contract dollars but just 9.4% to all Central Health spending; NAICS code 238210 contributed 13.4% to all White woman contract dollars and 7.4% to all Central Health spending.

Table 3-16: Three NAICS Codes where White Woman Firms Received the Most Spending

NAICS Code	NAICS Code Label	Weight	Share of Total White Woman Dollars	Share of Total Non-M/WBE Dollars
541310	Architectural Services	6.1%	31.8%	0.8%
541820	Public Relations Agencies	9.4%	29.4%	5.0%
238210	Electrical Contractors and Other Wiring Installation Contractors	7.4%	13.4%	6.8%
Total 3-code Share of Total Group Dollars			74.6%	12.6%

Source: CHA analysis of Central Health data

The data presented in Tables 3-13 through 3-16 support the inference that regardless of any statistical disparities between contract utilization and weighted availability, the experiences of M/WBEs with respect to participation in Central Health procurement programs is significantly different than the experiences of non-M/WBEs. The NAICS codes where M/WBEs receive a large proportion of their contract dollars are significantly different from the codes where non-M/WBEs receive a large portion of their contract dollars.

F. Disparity Analysis of M/WBEs for Central Health’s Contracts

As required by strict constitutional scrutiny, we next calculated disparity ratios for each demographic group, comparing the group’s total utilization compared to its total weighted availability.

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

$$DR = U/WA$$

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

The courts have held that disparity results must be analyzed to determine whether the results are “significant”. There are two distinct methods to measure a result’s significance. First, a “large” or “substantively significant” disparity is commonly defined by courts as utilization that is equal to or less than 80% of the availability measure. A substantively significant disparity supports the inference that the result may be caused by the disparate impacts of discrimination.¹⁷⁰ Second, statistically significant disparity means that an outcome is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone.¹⁷¹ A more in-depth discussion of statistical significance is provided in Appendix C.

Substantive and Statistical Significance

- ‡ Connotes these values are substantively significant. Courts have ruled the disparity ratio less or equal to 80 percent represent disparities that are substantively significant. (See Footnote 170 for more information.)
- * Connotes these values are statistically significant at the 0.05 level. (See Appendix C for more information.)
- ** Connotes these values are statistically significant at the 0.01 level. (See Appendix C for more information.)
- *** Connotes these values are statistically significant at the 0.001 level. (See Appendix C for more information.)

Table 3-17 presents the disparity ratios for each demographic group. The disparity ratio for Native Americans is substantively significant. The ratios for M/WBEs and non-M/WBEs were statistically significant at the 0.01 and 0.05 levels, respectively.

170. See U.S. Equal Employment Opportunity Commission regulation, 29 C.F.R. §1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”).

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

Table 3-17: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE
Disparity Ratio	109.1%	161.5%	92.8%	0.0%‡	131.4%	206.0%	173.7%*	88.3%**

Source: CHA analysis of Central Health data

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 level

‡ Indicates substantive significance

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

- The NAICS code share of overall spending exceeds six percent; and
- The particular M/WBE utilization in that code exceeds six percent.

Table 3-18 presents the seven codes where the weight of Central Health spending exceeded 6.0% and also exceeded the M/WBE utilization in each code. The weight threshold of 6% was selected because those seven codes captured 64.2% of all Central Health spending and M/WBEs received no contracts in the codes with next highest weights, which were 4.9% and 4.6%. The cells that are bolded present those codes for each M/WBE where the utilization exceeded 6.0%.

Table 3-18: Targeted NAICS Codes for Further Exploration of M/WBE Contract Dollars

NAICS	NAICS Code Description	Central Health Weight in Each Code	M/WBE Utilization in Each Code				
			Black	Hispanic	Asian	Native American	White Woman
238220	Plumbing, Heating, and Air-Conditioning Contractors	14.6%	0.0%	0.0%	0.0%	0.0%	0.0%
541110	Offices of Lawyers	13.3%	8.1%	0.0%	0.0%	0.0%	5.6%
541820	Public Relations Agencies	9.4%	0.0%	9.4%	0.4%	0.0%	49.9%
238210	Electrical Contractors and Other Wiring Installation Contractors	7.4%	0.0%	0.0%	0.0%	0.0%	29.1%

NAICS	NAICS Code Description	Central Health Weight in Each Code	M/WBE Utilization in Each Code				
			Black	Hispanic	Asian	Native American	White Woman
518210	Data Processing, Hosting, and Related Services	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%
236220	Commercial and Institutional Building Construction	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%
541310	Architectural Services	6.1%	0.0%	6.6%	0.0%	0.0%	83.2%

Source: CHA analysis of Central Health data

Given these criteria, seven NAICS codes received at least six percent of Central Health spending. Of these seven, M/WBE utilization exceeded six percent in only five cases. We examined more closely the Black utilization in one code; Hispanic utilization in two codes; and White Woman utilization in three codes. Tables 3-19 through 3-27 present the results of this investigation.

Table 3-19 presents the one NAICS code selected to further explore the Black disparity ratio of 109.1%. NAICS codes 541110 ranked second in terms of the overall amount of Central Health spending.

Table 3-19: Targeted NAICS Codes for Further Exploration of Black Contract Dollars

NAICS	NAICS Code Description	Weight	Overall Weight Rank	Black Utilization
541110	Offices of Lawyers	13.3%	2	8.1%

Source: CHA analysis of Central Health data

In Table 3-20, we explore the levels of firm concentration by examining several factors:

- The NAICS code’s share of all Central Health spending with Black firms compared to the NAICS code’s share of Central Health spending received by non-M/WBEs. This examines how important spending in the NAICS code was to the overall revenue received by Black firms compared to that same metric for non-M/WBEs. In a world where race and gender did not affect outcomes, the share would be similar.
- The number of Black firms that received contracts compared to the number of non-M/WBEs that received contracts.

- The share of Black contract dollars in each NAICS code received by the first, second, and third largest Black firms compared to the corresponding non-M/WBEs.
- The aggregate share of Black contract dollars received by the top three Black firms and the corresponding figure for non-M/WBEs.
- The aggregate share of Black contract dollars received by Black firms outside of the top three firms along with the corresponding figure for the non-M/WBEs outside of the top three.

These five metrics evaluate whether fewer Black firms received contracts compared to non-M/WBEs and whether the Black contract dollars were more concentrated compared to the level of concentration among non-M/WBEs. If either was the case, then the high level of utilization by Black firms (and hence, the high disparity ratio) resulted from the success of a few Black firms and not from a distribution across the entire spectrum of Black firms. This would be in contrast to a wider spectrum of success among non-M/WBE firms.

Table 3-20 presents these data for Black firms and non-M/WBE firms in NAICS Code 541110. This code contains 85.1% of all Black contract dollars but only 15.1% of all non-M/WBE contract dollars. In addition, there are fewer Black firms receiving contracts compared to non-M/WBE firms receiving contracts. In this code, one non-M/WBE firm receives the bulk of non-M/WBE contract dollars in this code.

**Table 3-20: Comparing Black and Non-M/WBE Outcomes
NAICS Code 541511: Custom Computer Programming Services
(NAICS Code Weight of All Central Health Spending: 13.3%)**

	Black	Non-M/WBE
NAICS code share of all spending	85.1%	15.1%
Number of firms	2	7
Share of group spending in NAICS code by the largest firm	56.7%	92.6%
Share of group spending in NAICS code by the second largest firm	43.3%	2.3%
Share of group spending in NAICS code by the third largest firm	0.0%	1.8%
Share of group spending in NAICS code by the three largest firms	100.0%	96.6%
Share of group spending in NAICS code by the remaining firms	0.0%	3.4%

Source: CHA analysis of Central Health data

The difference between the 85.1% of all Black contract dollars and the 13.3% all of Central Health spending is striking. Given the disparity ratio was close to parity, this oddity could explain that result.

The approach used to examine the Black disparity ratio was also used for the disparity ratios for Hispanic and White woman firms.

Table 3-21 presents the two NAICS codes selected to further explore the Hispanic disparity ratio of 161.5%. NAICS codes 541820 and 541310 ranked third and seventh respectively in terms of the overall amount of Central Health spending in each code. Of the top seven NAICS codes, these two were the only codes where Hispanic utilization exceeded six percent.

Table 3-21: Targeted NAICS Codes for Further Exploration of Hispanic Contract Dollars

NAICS	NAICS Code Description	Weight	Overall Weight Rank	Hispanic Utilization
541820	Public Relations Agencies	9.4%	3	9.4%
541310	Architectural Services	6.1%	7	6.6%

Source: CHA analysis of Central Health data

Table 3-22 presents these data for Hispanic firms and non-M/WBEs in NAICS Code 541820. This code contained 16.3% of all Hispanic contract dollars but only 5.0% of all non-M/WBE contract dollars. Fewer Hispanic firms received contracts in this code compared to non-M/WBEs.

**Table 3-22: Comparing Hispanic and Non-M/WBE Outcomes
NAICS Code 541820: Public Relations Agencies
(NAICS Code Weight of All Central Health Spending: 9.4%)**

	Hispanic	Non-M/WBE
NAICS code share of all spending	16.3%	5.0%
Number of firms	1	5
Share of group spending in NAICS code by the largest firm	100.0%	62.2%
Share of group spending in NAICS code by the second largest firm	0.0%	28.1%
Share of group spending in NAICS code by the third largest firm	0.0%	6.7%
Share of group spending in NAICS code by the three largest firms	100.0%	97.0%
Share of group spending in NAICS code by the remaining firms	0.0%	3.0%

Source: CHA analysis of Central Health data

Table 3-23 presents these data for Hispanic firms and non-M/WBE firms in NAICS Code 541310. This code contained 7.3% of all Hispanic contract dollars but only

0.8% of all non-M/WBE contract dollars. Fewer Hispanic firms received contracts in this code compared to non-M/WBEs.

**Table 3-23: Comparing Hispanic and Non-M/WBE Outcomes
NAICS Code 541310: Architectural Services
(NAICS Code Weight of All Central Health Spending: 6.1%)**

	Hispanic	Non-M/WBE
NAICS code share of all spending	7.3%	0.8%
Number of firms	1	3
Share of group spending in NAICS code by the largest firm	100.0%	84.2%
Share of group spending in NAICS code by the second largest firm	0.0%	13.4%
Share of group spending in NAICS code by the third largest firm	0.0%	2.4%
Share of group spending in NAICS code by the three largest firms	100.0%	100.0%
Share of group spending in NAICS code by the remaining firms	0.0%	0.0%

Source: CHA analysis of Central Health data

In summary, for both codes, the codes’ share of Hispanic contract dollars exceeded the codes’ share of non-M/WBE contract dollars. This distributional difference might account for the high disparity ratio.

Table 3-24 presents the three NAICS codes selected to further explore the White Woman disparity ratio of 206.0%. NAICS codes 541820, 238210, and 541310 ranked 3rd, 4th, and 7th respectively in terms of the overall amount of Central Health spending in each code. Of the top seven NAICS codes, these three were the only codes where White Woman utilization exceeded six percent.

Table 3-24: Targeted NAICS Codes for Further Exploration of White Woman Contract Dollars

NAICS	NAICS Code Description	Weight	Overall Weight Rank	White Woman Utilization
541820	Public Relations Agencies	9.4%	3	49.9%
238210	Electrical Contractors and Other Wiring Installation Contractors	7.8%	4	29.1%
541310	Architectural Services	6.1%	7	83.2%

Source: CHA analysis of Central Health data

Table 3-25 presents these data for White woman firms and non-M/WBEs in NAICS Code 541820. This code accounts for 29.4% of all White woman contract dollars

and 5.0% of all non-M/WBE contract dollars. Fewer White woman firms received contracts in this code compared to non-M/WBEs.

Table 3-25: Comparing White Woman and Non-M/WBE Outcomes
NAICS Code 541820: Public Relations Agencies
(NAICS Code Weight of All Central Health Spending: 9.4%)

	White Woman	Non-M/WBE
NAICS code share of all spending	29.4%	5.0%
Number of firms	4	5
Share of group spending in NAICS code by the largest firm	45.3%	62.2%
Share of group spending in NAICS code by the second largest firm	30.8%	28.1%
Share of group spending in NAICS code by the third largest firm	23.4%	6.7%
Share of group spending in NAICS code by the three largest firms	99.6%	97.0%
Share of group spending in NAICS code by the remaining firms	0.4%	3.0%

Source: CHA analysis of Central Health data

Table 3-26 presents these data for White woman firms and non-M/WBEs in NAICS Code 238210. This code accounts for 13.4% of all White woman contract dollars but only 6.8% of all non-M/WBE contract dollars. Three White woman firms received contracts in this code; this was identical to the number of non-M/WBEs.

Table 3-26: Comparing White Woman and Non-M/WBE Outcomes
NAICS Code 238210: Electrical Contractors and Other Wiring
Installation Contractors
(NAICS Code Weight of All Central Health Spending: 7.8%)

	White Woman	Non-M/WBE
NAICS code share of all spending	13.4%	6.8%
Number of firms	3	3
Share of group spending in NAICS code by the largest firm	65.8%	61.9%
Share of group spending in NAICS code by the second largest firm	28.5%	34.0%
Share of group spending in NAICS code by the third largest firm	5.7%	4.0%
Share of group spending in NAICS code by the three largest firms	100.0%	100.0%
Share of group spending in NAICS code by the remaining firms	0.0%	0.0%

Source: CHA analysis of Central Health data

Table 3-27 presents these data for White woman firms and non-M/WBEs in NAICS Code 541310. This code contained 31.8% of all White woman contract dollars but only 0.8% of all non-M/WBE contract dollars. Fewer White woman firms received contracts in this code compared to non-M/WBEs.

**Table 3-27: Comparing White Woman and Non-M/WBE Outcomes
NAICS Code 541310: Architectural Services
(NAICS Code Weight of All Central Health Spending: 6.1%)**

	White Woman	Non-M/WBE
NAICS code share of all spending	31.8%	0.8%
Number of firms	2	3
Share of group spending in NAICS code by the largest firm	22.2%	84.2%
Share of group spending in NAICS code by the second largest firm	77.8%	13.4%
Share of group spending in NAICS code by the third largest firm	0.0%	2.4%
Share of group spending in NAICS code by the three largest firms	100.0%	100.0%
Share of group spending in NAICS code by the remaining firms	0.0%	0.0%

Source: CHA analysis of Central Health data

G. Conclusion

This Chapter presented the results of the CHA analysis of Central Health contract data and customized availability database compiled from a variety of sources. The significance of the disparity ratios for MBEs as a group and M/WBEs as a whole, reflect Central Health’s spending patterns in certain key NAICS codes, where spending accounted for a far greater share of overall Black, Hispanic, and White Woman contract dollars. We therefore conclude M/WBE firms have not reached parity in all aspects of Central Health’s contracting activities compared to non-M/WBE firms.

IV. ANALYSIS OF DISPARITIES IN THE AUSTIN AREA ECONOMY

A. Introduction

The late Nobel Prize Laureate Kenneth Arrow, in his seminal paper on the economic analysis of discrimination, observed:

Racial discrimination pervades every aspect of a society in which it is found. It is found above all in attitudes of both races, but also in social relations, in intermarriage, in residential location, and frequently in legal barriers. It is also found in levels of economic accomplishment; this is income, wages, prices paid, and credit extended.¹⁷²

This Chapter explores the data and literature relevant to how discrimination in the Austin area economy affects the ability of minorities and women to fairly and fully engage in Central Health contract opportunities. First, we analyze the rates at which Minority- and Woman-Owned Business Enterprises (“M/WBEs”) in the Austin area economy form firms and their earnings from those firms. Next, we summarize the literature on barriers to equal access to commercial credit. Finally, we summarize the literature on barriers to equal access to human capital. All three types of evidence have been found by the courts to be relevant and probative of whether a government will be a passive participant in discrimination without some type of affirmative intervention.

A key element to determine the need for Central Health to intervene in its market through contract goals is an analysis of the extent of disparities independent of the agency’s intervention through its contracting affirmative action program.

The courts have repeatedly held that analysis of disparities in the rate of M/WBE business formation in the government’s markets as compared to similar non-M/WBEs, disparities in M/WBE earnings, and barriers to access to capital markets are highly relevant to a determination of whether market outcomes are affected by race or gender ownership status.¹⁷³ Similar analyses supported the successful legal defense of the Illinois Tollway’s Disadvantaged Business Enterprise (“DBE”) Program from constitutional challenge.¹⁷⁴

172. Arrow, Kenneth J., “What Has Economics to say about racial discrimination?” *Journal of Economic Perspectives*, 12, 2, (1998), 91-100.

173. See the discussion in Chapter II of the legal standards applicable to contracting affirmative action programs.

Similarly, the Tenth Circuit Court of Appeals also upheld the U.S. Department of Transportation's DBE program, and in doing so, stated that this type of evidence

demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination, precluding from the outset competition for public construction contracts by minority enterprises. The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination, precluding existing minority firms from effectively competing for public construction contracts. The government also presents further evidence in the form of local disparity studies of minority subcontracting and studies of local subcontracting markets after the removal of affirmative action programs... The government's evidence is particularly striking in the area of the race-based denial of access to capital, without which the formation of minority subcontracting enterprises is stymied.¹⁷⁵

Business discrimination studies and lending studies are relevant and probative because they show a strong link between the disbursement of public funds and the channeling of those funds due to private discrimination. In unanimously upholding the USDOT DBE Program, federal courts agree that disparities between the earnings of minority-owned firms and similarly situated non-minority-owned firms and the disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners are strong evidence of the continuing effects of discrimination.¹⁷⁶ "Evidence that private discrimination results in barriers to business formation is relevant because it demonstrates that M/WBEs are precluded *at the outset* from competing for public construction contracts. Evidence of barriers to fair competition is also relevant

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174. *Midwest Fence Corp. v. Illinois Department of Transportation, Illinois State Toll Highway Authority et al*, 840 F.3d 942 (7th Cir. 2016) (upholding the Illinois Tollway's program for state funded contracts modeled after Part 26 and based on CHA's expert testimony, including about disparities in the overall Illinois construction industry); *Midwest Fence Corp. v. Illinois Department of Transportation, Illinois State Toll Highway Authority et al*, 2015 WL 1396376 at * 21 (N.D. Ill.) ("Colette Holt [& Associates'] updated census analysis controlled for variables such as education, age, and occupation and still found lower earnings and rates of business formation among women and minorities as compared to white men."); *Builders Association of Greater Chicago v. City of Chicago*, 298 F.Supp.2d 725 (N.D. Ill. 2003) (holding that City of Chicago's M/WBE program for local construction contracts satisfied "compelling interest" standards using this framework).
175. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1168-1169 (10th Cir. 2000), cert. granted then dismissed as improvidently granted, 532 U.S. 941 (2001).
176. *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868, at *64 (Sept. 8, 2005).

because it again demonstrates that *existing* M/WBEs are precluded from competing for public contracts.”¹⁷⁷

This type of court-approved analysis is especially important for an agency such as Central Health, which has been implementing a program for many years. The agency’s remedial market interventions through the use of race- and gender-based contract goals may ameliorate the disparate impacts of marketplace discrimination in the agency’s own contracting activities. Put another way, the program’s success in moving towards parity for minority and woman firms may be “masking” the effects of discrimination that, but for the contract goals, would mirror the disparities in M/WBE utilization in the overall economy.

To explore the question of whether firms owned by non-Whites and White women face disparate treatment in Austin area marketplace outside of Central Health’s contracts, we examined the U.S. Bureau of the Census’ *American Community Survey* (“ACS”) which allows us to analyze disparities using individual entrepreneurs as the basic unit of analysis.¹⁷⁸ We used the Austin-metropolitan area as the geographic unit of analysis, since Central Health’s market area is broader than Travis County.

We found disparities in wages, business earnings and business formation rates for minorities and women in all industry sectors in Austin area marketplace.¹⁷⁹

B. Disparate Treatment in Austin Metropolitan Area Marketplace: Evidence from the Census Bureau’s 2015 - 2019 American Community Survey

As discussed in the beginning of this Chapter, the key question is whether firms owned by non-Whites and White women face disparate treatment in the marketplace without the intervention of a business diversity program. In this section, we use the Census Bureau’s ACS data to explore this and other aspects of this question. One element asks if demographic differences exist in the wage and salary income received by private sector workers. Beyond the results of bias in the incomes generated in the private sector, this exploration is important for the issue of possible variations in the rate of business formation by different demographic

177. *Id.*

178. Data from 2015 - 2019 American Community Survey are the most recent for a five-year period.

179. Possible disparities in wages are important to explore because of the relationship between wages and business formation. Research by Alicia Robb and others indicate non-White firms rely on their own financing to start businesses compared to White firms who rely more heavily on financing provided by financial institutions. To the extent non-Whites face discrimination in the labor market, they would have reduced capacity to self-finance their entrepreneurial efforts and, hence, impact business formation. *See, for example*, Robb’s “Access to Capital among Young Firms, Minority-owned Firms, Woman-owned Firms, and High-tech Firms” (2013), [https://www.sba.gov/sites/default/files/files/rs403tot\(2\).pdf](https://www.sba.gov/sites/default/files/files/rs403tot(2).pdf).

groups. One of the determinants of business formation is the pool of financial capital at the disposal of the prospective entrepreneur. The size of this pool is related to the income level of the individual either because the income level impacts the amount of personal savings that can be used for start-up capital, or the income level affects one's ability to borrow funds. Consequently, if particular demographic groups receive lower wages and salaries, then they would have access to a smaller pool of financial capital, and thus reduced likelihood of business formation.

The *American Community Survey Public Use Microdata Sample* ("PUMS") is useful in addressing these issues. The ACS is an annual survey of one percent of the population and the PUMS provides detailed information at the individual level. In order to obtain robust results from our analysis, we used the file that combines the most recent data available for years 2015 through 2019.¹⁸⁰ With this rich data set, our analysis can establish with greater certainty any causal links between race, gender and economic outcomes.

The Census Bureau classifies Whites, Blacks, Native Americans, and Asians as racial groupings. CHA developed a fifth grouping, "Other", to capture individuals who are not a member of the above four racial categories. In addition, Hispanics are an ethnic category whose members could be of any race, *e.g.*, Hispanics could be White or Black. In order to avoid double counting – *i.e.*, an individual could be counted once as Hispanic and once as White – CHA developed non-Hispanic subset racial categories: non-Hispanic Whites; non-Hispanic Blacks; non-Hispanic Native Americans; non-Hispanic Asians; and non-Hispanic Others. When those five groups are added to the Hispanic group, the entire population is counted and there is no double-counting. When Whites are disaggregated into White men and White women, those groupings are non-Hispanic White men and non-Hispanic White women. For ease of exposition, the groups in this report are referred to as Black, Native American, Asian, Other, White women, and White men, while the actual content is the non-Hispanic subset of these racial groups.

Often, the general public sees clear associations between race, gender, and economic outcomes and assumes this association reflects a tight causal connection. However, economic outcomes are determined by a broad set of factors including, and extending beyond, race and gender. To provide a simple example, two people who differ by race or gender may receive different wages. This difference may simply reflect that the individuals work in different industries. If this underlying difference is not known, one might assert the wage differential is the result of race or gender difference. To better understand the impact of race or gender on wages, it is important to compare individuals of different races or genders who work in the same industry. Of course, wages are determined by a broad set of factors beyond

180. Initially, the Census Bureau contacted approximately 3.5M households. For the analysis reported in this Chapter, we examined over 47,000 observations. For more information about the ACS PUMS, see <https://www.census.gov/programs-surveys/acs/>.

race, gender, and industry. With the ACS PUMS, we have the ability to include a wide range of additional variables such as age, education, occupation, and state of residence in the analysis.

We employ a multiple regression statistical technique to process this data. This methodology allows us to perform two analyses: an estimation of how variations in certain characteristics (called independent variables) will impact the level of some particular outcome (called a dependent variable), and a determination of how confident we are that the estimated variation is statistically different from zero. We have provided a more detailed explanation of this technique in Appendix A.

With respect to the first result of regression analysis, we examine how variations in the race, gender, and industry of individuals impact the wages and other economic outcomes received by individuals. The technique allows us to determine the effect of changes in one variable, assuming that the other determining variables are the same. That is, we compare individuals of different races, but of the same gender and in the same industry; or we compare individuals of different genders, but of the same race and the same industry; or we compare individuals in different industries, but of the same race and gender. We determine the impact of changes in one variable (*e.g.*, race, gender or industry) on another variable (wages), “controlling for” the movement of any other independent variables.

With respect to the second result of regression analysis, we determine the statistical significance of the relationship between the dependent variable and independent variable. For example, the relationship between gender and wages might exist (*e.g.*, holding all other factors constant, women earn less than men), but we find that it is not statistically different from zero. In this case, we are not confident that there is not any relationship between the two variables. If the relationship is not statistically different from zero, then a variation in the independent variable has no impact on the dependent variable. The regression analysis allows us to say with varying degrees of statistical confidence that a relationship is different from zero. If the estimated relationship is statistically significant at the 0.05 level, that indicates that we are 95% confident that the relationship is different from zero; if the estimated relationship is statistically significant at the 0.01 level, that indicates that we are 99% confident that the relationship is different from zero; if the estimated relationship is statistically significant at the 0.001 level, that indicates that we are 99.9% confident that the relationship is different from zero.¹⁸¹

In the following presentation of results, each sub-section first reports data on the share of a demographic group that forms a business (business formation rates); the probabilities that a demographic group will form a business relative to White

181. Most social scientists do not endorse utilizing a confidence level of less than 95%. Appendix C explains more about statistical significance.

men (business formation probabilities); the differences in wages received by a demographic group relative to White men (wage differentials); and the differences in business earnings received by a demographic group relative to White men (business earnings differentials). Because the ACS contained limited observations for certain groups in particular industries, we were unable to provide reliable estimates for business outcomes for these groups. However, there were always sufficient observations in the sample of wage earners in each group in each industry to permit us to develop reliable estimates.

1. All Industries Combined in the Austin Metropolitan Area

One method of exploring differences in economic outcomes is to examine the rate at which different demographic groups form businesses. We developed these business formation rates using data from the U.S. Bureau of the Census' ACS for the Austin-Round Rock Metropolitan Statistical Area¹⁸². Table 4-1 presents these results.

The business formation rate represents the share of a population that forms businesses. When developing industry-specific rates, we examine the population that works in that industry and identify the share of that sub-population that forms businesses. For example, Table 4-1 indicates that 2.7% of Blacks forms businesses; this is less than the 6.7% business formation rate for White men. The Table indicates that White men have higher business formation rates compared to non-Whites and White women. Table 4-2 utilizes probit regression analysis to examine the probability of forming a business after controlling for age, education, industry and occupation.¹⁸³ This Table indicates that non-Whites and White women are less likely to form businesses compared to White men; the reduced probability ranges from 0.6% for Others to 4.7% for Native Americans. These results were statistically significant at the 0.01 level for Blacks, Hispanics, and White women.

With respect to the interpretation of the level of statistical significance of a result, as indicated in the latter part of the previous section, we are exploring whether the result of the regression analysis is statistically different from zero; if the finding is statistically significant, we also indicate the level of statistical confidence at which the result is accurate. Table 4-2 indicates that the probability that Blacks form businesses is 3.9% less than the probability that White men form business. The statistical significance of this result is at the 0.01 level, which means we are 99% statistically confident the result is true. If a result is non-zero but the result is not statistically significant, then we cannot rule out zero being the true result. Note: this does not mean the result is wrong, only

182. The MSA consists of Bastrop, Caldwell, Hays, Travis, and Williamson counties.

183. Appendix B provides a "Further Explanation of Probit Regression Analysis."

there is not a statistically significant level of confidence in the result. Table 4-2 indicates that the probability that Native Americans form businesses is 4.7% less than White men.

Another way to measure equity is to examine how the wage and salary incomes and business earnings of particular demographic groups compare to White men. Multiple regression statistical techniques allowed us to examine the impact of race and gender on economic outcomes while controlling for other factors, such as education and age.¹⁸⁴ Tables 4-3 and 4-4 present this data on wage and salary incomes and business earnings respectively. Table 4-3 indicates that non-Whites and White women earn less than White men. The reduction in earnings ranges from 19.3% to 46.8% and all of the results are statistically significant at the 0.001 level (except the coefficient for Native Americans which is statistically significant at the 0.05 level). Table 4-4 indicates that Blacks, Others, and White women receive business earnings less than White men. The reduction in earnings ranges from 186.0% to 58.9%. These results were statistically significant.

Table 4-1: Business Formation Rates

All Industries, 2015 - 2019¹⁸⁵

Demographic Group	Business Formation Rates
Black	2.7%
Hispanic	2.7%
Native American	1.8%
Asian/Pacific Islander	3.8%
Other	5.1%
White Women	4.6%
Non-White Male	3.5%
White Male	6.7%

Source: CHA calculations from the American Community Survey

184. See Appendix A for more information on multiple regression statistical analysis.

185. Statistical significance tests were not conducted on basic business formation rates.

**Table 4-2: Business Formation Probabilities Relative to White Males
All Industries, 2015 - 2019**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.9%**
Hispanic	-2.7%**
Native American	-4.7%
Asian/Pacific Islander	-1.5%
Other	-0.6%
White Women	-1.7%**

Source: CHA calculations from the American Community Survey
** Indicates statistical significance at the 0.01 level

**Table 4-3: Wage Differentials for Selected Groups Relative to White Men
All Industries, 2015 - 2019**

Demographic Group	Wages Relative to White Men (% Change)
Black	-32.6%***
Hispanic	-19.3%***
Native American	-24.8%*
Asian/Pacific Islander	-27.5%***
Other	-46.8%***
White Women	-30.2%***

Source: CHA calculations from the American Community Survey
*** Indicates statistical significance at the 0.001 level
* Indicates statistical significance at the 0.05 level

**Table 4-4: Business Earnings Differentials for Selected Groups Relative to White Men
All Industries**

Demographic Group	Earnings Relative to White Men (% Change)
Black	-92.6%**
Hispanic	1.3%
Native American	105.0%
Asian/Pacific Islander	40.4%
Other	-186.0% ^a
White Women	-58.9%***

a. The proper way to interpret a coefficient that is less than negative 100% (e.g., the value of the coefficient for Other in Table 4-4), is the percentage amount non-M/WBEs earn that is more than the group in question. In this case, non-M/WBEs earn 186% more than Others.

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 level

2. The Construction Industry in the Austin Metropolitan Area

There were low numbers of Native American (1) and Other firms (0) in the sample of the construction industry; consequently, reliable estimates of firm outcomes could not be made for these groups. Table 4-5 indicates that White men have higher business formation rates compared to non-Whites and White women. Table 4-6 indicates that non-Whites and White women are less likely to form businesses compared to similarly situated White men. The reduced probabilities of business formation ranged from 15.9% to 0.8%. None of these coefficients were statistically significant. Table 4-7 indicates that non-Whites and White women earn less than White men. The statistically significant reductions in earnings range from 53.5% to 13.2%. Four of these coefficients were statistically significant. Table 4-8 indicates that none of the business coefficients were statistically significant.

**Table 4-5: Table 4-5 Business Formation Rates
Construction, 2015 - 2019**

Demographic Group	Business Formation Rates
Black	1.1%
Hispanic	4.9%
Native American	---
Asian/Pacific Islander	4.2%
Other	---
White Women	10.2%
Non-White Male	5.1%
White Male	14.3%

Source: CHA calculations from the American Community Survey

**Table 4-6: Business Formation Probability Differentials for Selected Groups
Relative to White Men, Construction, 2015 - 2019**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-15.9%
Hispanic	-4.0%
Native American	---
Asian/Pacific Islander	-4.3%
Other	---
White Women	-0.8%

Source: CHA calculations from the American Community Survey

**Table 4-7: Wage Differentials for Selected Groups Relative to White Men
Construction, 2015 - 2019**

Demographic Group	Wages Relative to White Men (% Change)
Black	-48.4%***
Hispanic	-15.4%***
Native American	-13.2%

Demographic Group	Wages Relative to White Men (% Change)
Asian/Pacific Islander	-53.5%**
Other	-42.6%
White Women	-25.4%**

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

Table 4-8: Business Earnings Differentials for Selected Groups Relative to White Men

Construction, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	37.3%
Hispanic	18.2%
Native American	---
Asian/Pacific Islander	-140.0%
Other	---
White Women	-88.6%

Source: CHA calculations from the American Community Survey

3. The Construction-Related Services Industry in the Austin Metropolitan Area

The sample of firms in the construction-related services industry contained too few numbers of Black, Hispanic, Native American, Asian, White woman, and Other firms to produce reliable estimates for these groups. The wages for White women were 18.6% less than those of White men and this result was statistically significant at the 0.01 level.

**Table 4-9: Business Formation Rates
Construction-Related Services, 2015 - 2019**

Demographic Group	Business Formation Rates
Black	---
Hispanic	---
Native American	---

Demographic Group	Business Formation Rates
Asian/Pacific Islander	---
Other	---
White Women	---
Non-White Male	---
White Male	7.0%

Source: CHA calculations from the American Community Survey

Table 4-10: Business Formation Probability Differentials for Selected Groups Relative to White Men, Construction-related Services, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	---
Other	---
White Women	---

Source: CHA calculations from the American Community Survey

Table 4-11: Wage Differentials for Selected Groups Relative to White Men Construction-Related Services, 2015 - 2019

Demographic Group	Wages Relative to White Men (% Change)
Black	5.0%
Hispanic	-13.9%
Native American	---
Asian/Pacific Islander	-5.7%
Other	-23.3%
White Women	-18.6%**

Source: CHA calculations from the American Community Survey

** Indicates statistical significance at the 0.01 level

Table 4-12: Business Earnings Differentials for Selected Groups Relative to White Men
Construction-related Services, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	---
Other	---
White Women	---

Source: CHA calculations from the American Community Survey

4. The Goods Industry in Austin Metropolitan Area

There were low numbers of Black (4), Hispanic (13), Native American (0), Asian (9), and Other firms (0) in the sample of the goods industry. Therefore, once again, reliable estimates of firm outcomes could not be made for these groups. Table 4-13 indicates that White women have higher business formation rates compared to White men. While Table 4-14 indicates that White women form businesses at a higher rate than White men, the result is statistically insignificant. Table 4-15 indicates that statistically significant results are found for five groups (Black; Hispanic; Asian/Pacific Islanders; Others; and White women) and all indicate lower wages relative to White men. Table 4-16 indicates that the coefficients for White woman business earnings were not statistically significant.

Table 4-13: Business Formation Rates
Goods, 2015 - 2019

Demographic Group	Business Formation Rates
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	---
Other	---

Demographic Group	Business Formation Rates
White Women	5.8%
Non-White Male	---
White Male	3.7%

Source: CHA calculations from the American Community Survey

**Table 4-14: Business Formation Probabilities Relative to White Males
Goods, 2015 - 2019**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	---
Other	---
White Women	0.8%

Source: CHA calculations from the American Community Survey

**Table 4-15: Wage Differentials for Selected Groups Relative to White Men
Goods, 2015 - 2019**

Demographic Group	Wages Relative to White Men (% Change)
Black	-39.0%***
Hispanic	-16.5%**
Native American	-42.2%
Asian/Pacific Islander	-44.4%***
Other	-113.0%**
White Women	-51.9%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

**Table 4-16: Business Earnings Differentials for Selected Groups Relative to White Men
Goods, 2015 - 2019**

Demographic Group	Earnings Relative to White Men (% Change)
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	---
Other	---
White Women	60.5%

Source: CHA calculations from the American Community Survey

5. The Services Industry in Austin Metropolitan Area

There were low numbers of Native American (1) and Other firms (8) in the sample of the services industry; consequently, reliable estimates of firm outcomes could not be made for these groups. Table 4-17 indicates that White men have higher business formation rates compared to non-Whites and White women. Table 4-18 indicates that non-Whites and White women are less likely to form businesses compared to similarly situated White men and the coefficients are statistically significant at the 0.01 level. Table 4-19 indicates that non-Whites and White women earn less than White men – ranging from 19.5% to 34.2% – and these coefficients were statistically significant. Table 4-20 indicates that Black-owned and White woman-owned firms earned less than White male-owned firms and these results were statistically significant.

**Table 4-17: Business Formation Rates
Services, 2015 - 2019**

Demographic Group	Business Formation Rates
Black	3.3%
Hispanic	2.9%
Native American	---
Asian/Pacific Islander	4.1%
Other	---

Demographic Group	Business Formation Rates
White Women	5.8%
Non-White Male	4.3%
White Male	8.1%

Source: CHA calculations from the American Community Survey

Table 4-18: Business Formation Probability Differentials for Selected Groups Relative to White Men, Services, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-3.3%**
Hispanic	-2.6%***
Native American	---
Asian/Pacific Islander	-2.5%***
Other	---
White Women	-1.6%***

Source: CHA calculations from the American Community Survey

** Indicates statistical significance at the 0.01 level

Table 4-19: Wage Differentials for Selected Groups Relative to White Men Services, 2015 - 2019

Demographic Group	Wages Relative to White Men (% Change)
Black	-31.4%***
Hispanic	-19.5%***
Native American	-23.0%
Asian/Pacific Islander	-28.7%***
Other	-34.2%**
White Women	-26.3%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

Table 4-20: Business Earnings Differentials for Selected Groups Relative to White Men Services, 2015 - 2019

Demographic Group	Earnings Relative to White Men (% Change)
Black	-129.0% **
Hispanic	-26.8%
Native American	---
Asian/Pacific Islander	21.9%
Other	---
White Women	-60.4% ***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

6. The Information Technology Industry in the Austin Metropolitan Area

There were low numbers of Blacks (2), Hispanics (10), Native American (0), and Other (1) sampled in the information technology industry. Therefore, reliable estimates of firm outcomes could not be made in this sector. Table 4-21 indicates that White men have higher business formation rates compared to Asians but lower compared to White women. Table 4-22 indicates that none of the coefficients were statistically significant. Table 4-23 indicates that non-Whites and White women earn less than White men and the coefficients for Blacks, Hispanics, Asians, and White women were statistically significant. Table 4-24 indicates that two business coefficients (Asian/Pacific Islanders; White women) were not statistically significant.

Table 4-21: Business Formation Rates Information Technology, 2015 - 2019

Demographic Group	Business Formation Rates
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	3.0%
Other	---

Demographic Group	Business Formation Rates
White Women	4.6%
Non-White Male	---
White Male	4.1%

Source: CHA calculations from the American Community Survey

Table 4-22: Business Formation Probability Differentials for Selected Groups Relative to White Men, Information Technology, 2015 - 2019

Demographic Group	Probability of Forming a Business Relative to White Men
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	-1.8%
Other	---
White Women	-0.3%

Source: CHA calculations from the American Community Survey

Table 4-23: Wage Differentials for Selected Groups Relative to White Men Information Technology, 2015 - 2019

Demographic Group	Wages Relative to White Men (% Change)
Black	-20.4% ^{**}
Hispanic	-30.9% ^{***}
Native American	-9.0%
Asian/Pacific Islander	-16.3% ^{***}
Other	-17.0%
White Women	-21.1% ^{***}

Source: CHA calculations from the American Community Survey

^{***} Indicates statistical significance at the 0.001 level

^{**} Indicates statistical significance at the 0.01 level

**Table 4-24: Business Earnings Differentials for Selected Groups Relative to White Men
Information Technology, 2015 - 2019**

Demographic Group	Earnings Relative to White Men (% Change)
Black	---
Hispanic	---
Native American	---
Asian/Pacific Islander	-10.7%
Other	---
White Women	-63.0%

Source: CHA calculations from the American Community Survey

7. Conclusion

Overall, the data presented in the above tables indicate that non-Whites and White women form businesses less than White men and their wage and business earnings are less than those of White men. These analyses support the conclusion that barriers to business success do affect non-Whites and White women.

C. Disparate Treatment in the Austin Metropolitan Marketplace: Evidence from the Census Bureau's 2017 Annual Business Survey

We further examined whether non-Whites and White women have disparate outcomes when they are active in the Austin area marketplace. This question is operationalized by exploring if the share of business receipts, number of firms, and payroll for firms owned by non-Whites and White women is greater than, less than, or equal to the share of all firms owned by non-Whites and White women.

To answer this question, we examined the U.S. Bureau's Annual Business Survey ("ABS"). The ABS supersedes the more well-known Survey of Business Owners ("SBO"). The SBO was last conducted in 2012 and historically has been reported every five years. In contrast, the ABS was first conducted in 2017 and it is the Census Bureau's goal to release results annually. As of the writing of this report, the most recent complete ABS contains 2017 data. The ABS surveyed about 850,000 employer firms and collected data on a variety of variables documenting ownership characteristics including race, ethnicity, and gender. It also collected data on

the firms' business activity with variables marking the firms' number of employees, payroll size, sales and industry.¹⁸⁶ For this analysis, we examined firms in the State of Texas. The state was the geographic unit of analysis because the ABS does not present data at the sub-state level.

With these data, we grouped the firms into the following ownership categories:^{187,188}

- Hispanics
- non-Hispanic Blacks
- non-Hispanic Native Americans
- non-Hispanic Asians
- non-Hispanic White women
- non-Hispanic White men
- Firms equally owned by non-Whites and Whites
- Firms equally owned by men and women
- Firms that were either publicly-owned or where the ownership could not be classified

For purposes of this analysis, the first four groups were aggregated to form a non-White category. Since our interest is the treatment of non-White-owned firms and White woman-owned firms, the last four groups were aggregated to form one category. To ensure this aggregated group is described accurately, we label this group "not non-White/non-White women". While this label is cumbersome, it is important to be clear that this group includes firms whose ownership extends beyond White men, such as firms that are not classifiable or that are publicly traded and thus have no racial ownership. In addition to the ownership demographic data, the Survey also gathers information on the sales, number of paid employees, and payroll for each reporting firm.

We analyzed the ABS data on the following sectors:

- Construction
- Professional, Scientific and Technical Services
- Goods

186. For more information on the Annual Business Survey see <https://www.census.gov/programs-surveys/abs/about.html>.

187. Race and gender labels reflect the categories used by the Census Bureau.

188. For expository purposes, the adjective "non-Hispanic" will not be used in this Chapter; the reader should assume that any racial group referenced does not include members of that group who identify ethnically as Hispanic.

- Other services

The ABS data – a sample of all businesses, not the entire universe of all businesses – required some adjustments. In particular, we had to define the sectors at the two-digit North American Industry Classification System (“NAICS”) code level, and therefore our sector definitions do not exactly correspond to the definitions used to analyze Central Health contract data in Chapter IV, where we are able to determine sectors at the six-digit NAICS code level. At a more detailed level, the number of firms sampled in particular demographic and sector cells may be so small that the Census Bureau does not report the information, either to avoid disclosing data on businesses that can be identified or because the small sample size generates unreliable estimates of the universe. We therefore report two-digit data.

Table 4-25 presents information on which NAICS codes were used to define each sector.

Table 4-25: Two-Digit NAICS Code Definition of Sector

ABS Sector Label	Two-Digit NAICS Codes
Construction	23
Professional, Scientific, and Technical Services ^a	54
Goods	31,42, 44
Other Services	48, 52, 53, 56, 61, 62, 71, 72, 81

a. This sector includes (but is broader than just) construction-related services. It is impossible to narrow this category to construction-related services without losing the capacity to conduct race and gender specific analyses.

The balance of this Chapter reports the findings of the ABS analysis.

1. All Industries

For a baseline analysis, we examined all industries. Table 4-26 presents data on the percentage share that each group has of the total of each of the following four business outcomes:

- The number of firms with employees (employer firms)
- The sales and receipts of all employer firms
- The number of paid employees
- The annual payroll of employer firms

Panel A of Table 4-26 presents data for the four basic non-White racial groups:

- Black

- Hispanic
- Native American
- Asian

Panel B of Table 4-26 presents data for the following types of firm ownership:

- Non-White
- White women
- Not non-White/non-White women¹⁸⁹

Categories in the second panel are mutually exclusive. Hence, firms that are non-White and equally owned by men and women are classified as non-White and firms that are equally owned by non-Whites and Whites and equally owned by men and women are classified as equally owned by non-Whites and Whites.

Since the central issue is the possible disparate treatment of non-White firms and White woman firms, we calculate three disparity ratios each for Black, Hispanic, Asian, Native American, non-White, and White woman firm respectively (a total of 18 ratios), presented in Table 4-27:

- Ratio of sales and receipts share for all employer firms over the share of total number of all employer firms.
- Ratio of sales and receipts share for employer firms over the share of total number of employer firms.
- Ratio of annual payroll share over the share of total number of employer firms.

For example, the disparity ratio of sales and receipts share for all firms over the share of total number of all employer firms for Black firms is 13.0% (as shown in Table 4-26). This is derived by taking the Black share of sales and receipts for all employer firms (0.3%) and dividing it by the Black share of total number of all employer firms (2.2%) that are presented in Table 4-26.¹⁹⁰ If Black-owned firms earned a share of sales equal to their share of total firms, the disparity index would have been 100%. An index less than 100% indicates that a given group is being utilized less than would be expected based on its availability, and courts have adopted the Equal Employment Opportunity Commission's

189. Again, while a cumbersome nomenclature, it is important to remain clear that this category includes firms other than those identified as owned by White men.

190. Please note that while the numbers presented in Table 4-26 are rounded to the first decimal place, the calculations resulting in the numbers presented in Table 4-27 are based on the actual (non-rounded) figures. Therefore, the Black ratio presented in Table 4-27 of 13.0% (as presented in Table 4-27) is not the same figure as that which would be derived when you divided 0.3 by 2.2 (the numbers presented in Table 4-26).

“80% rule” that a ratio less than 80% presents a *prima facie* case of discrimination.¹⁹¹ All of the 18 disparity ratios for non-White firms and White woman firms are below this threshold.¹⁹²

**Table 4-26: Demographic Distribution of Sales and Payroll Data – Aggregated Groups
All Industries, 2017**

	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts - All Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms				
Black	2.2%	0.3%	1.1%	0.6%
Hispanic	12.2%	2.2%	5.7%	3.4%
Asian	11.3%	2.1%	4.1%	2.4%
Native American	0.4%	0.1%	0.2%	0.1%
Panel B: Distribution of All Firms				
Non-White	26.1%	4.7%	11.1%	6.5%
White Women	13.6%	2.7%	5.8%	4.5%
Not Non-White/ Not White Women	60.3%	92.6%	83.1%	89.0%
All Firms	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from American Business Survey

191. 29 C.F.R. §1607.4(D) (“A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or 80%) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.”).

192. Because the data in the subsequent tables are presented for descriptive purposes, significance tests on these results are not conducted.

**Table 4-27: Disparity Ratios of Firm Utilization Measures
All Industries, 2017**

	Ratio of Sales to Number of Employer Firms	Ratio of Employees to Number of Employer Firms	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity Ratio for Non-White Firms			
Black	13.0%	50.5%	26.2%
Hispanic	18.0%	46.7%	27.5%
Asian	18.5%	36.6%	21.6%
Native American	22.1%	42.8%	30.0%
Panel B: Disparity Ratios for All Firms			
Non-White	17.8%	42.6%	24.9%
White Women	19.9%	42.9%	33.2%
Not Non-White/Not White Women	153.6%	137.7%	147.6%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from American Business Survey

This same approach was used to examine the Construction, Professional, Scientific and Technical Services, Goods, and Other Services sectors. The following are summaries of the results of the disparity analyses.

2. Construction

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 4-28, 17 fall under the 80% threshold.

**Table 4-28: Disparity Ratios – Aggregated Groups
Construction, 2017**

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity Ratios for Non-White Firms			
Black	48.4%	58.0%	44.7%
Hispanic	44.3%	52.3%	39.9%
Asian	35.9%	33.9%	29.8%
Native American	50.5%	69.2%	59.3%
Panel B: Disparity Ratios for All Firms			
Non-White	44.1%	51.8%	40.0%
White Women	62.9%	84.0%	74.6%
Not Non-White/Not White Women	119.4%	114.9%	119.2%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from American Business Survey

3. Professional, Scientific and Technical Services

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 4-29, all 18 fall under the 80% threshold.

**Table 4-29: Disparity Ratios – Aggregated Groups
Professional, Scientific and Technical Services, 2017**

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity Ratios for Non-White Firms			
Black	33.0%	34.9%	25.5%
Hispanic	34.7%	44.2%	26.8%
Asian	43.3%	44.4%	39.1%
Native American	34.4%	33.3%	24.9%
Panel B: Disparity Ratios for All Firms			
Non-White	38.5%	43.1%	32.3%
White Women	42.0%	44.1%	32.0%
Not Non-White/Not White Women	135.9%	133.8%	140.6%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from American Business Survey

4. Goods

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 4-30, all 18 fall under the 80% threshold.

**Table 4-30: Disparity Ratios – Aggregated Groups
Goods, 2017**

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity Ratios for Non-White Firms			
Black	13.5%	25.8%	20.9%
Hispanic	14.3%	29.8%	23.4%
Asian	12.7%	21.4%	14.3%
Native American	19.2%	42.7%	39.2%
Panel B: Disparity Ratios for All Firms			
Non-White	13.4%	24.9%	18.1%
White Women	13.8%	34.4%	30.8%
Not Non-White/Not White Women	158.7%	148.9%	152.8%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from American Business Survey

5. Services

Of the 18 disparity ratios for non-White firms and White woman firms presented in Table 4-31, all 18 fall under the 80% threshold.

**Table 4-31: Disparity Ratios – Aggregated Groups
Services, 2017**

	Ratio of Sales to Number of Firms (All Firms)	Ratio of Sales to Number of Firms (Employer Firms)	Ratio of Payroll to Number of Employer Firms
Panel A: Disparity Ratios for Non-White Firms			
Black	21.9%	59.3%	33.2%
Hispanic	24.6%	55.7%	34.5%
Asian	23.7%	44.4%	26.4%
Native American	23.3%	51.1%	24.7%
Panel B: Disparity Ratios for All Firms			
Non-White	23.9%	51.3%	30.9%
White Women	28.5%	46.8%	36.4%
Not Non-White/Not White Women	157.6%	138.7%	152.0%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from American Business Survey

6. Conclusion

Overall, the analysis of the ABS data presented in the above tables indicate that non-Whites and White women share of all employer firms is greater than their share of sales, payrolls, and employees. This supports the conclusion that barriers to business success disproportionately affect non-Whites and White women.

D. Evidence of Disparities in Access to Business Capital

Capital is the lifeblood of any business. Participants in the anecdotal data collection universally agreed to this fundamental fact. The interviews with business owners conducted as part of this Study confirmed that small firms, especially minority- and woman-owned firms, had difficulties obtaining needed working capital to perform on agency contracts and subcontracts, as well as expand the capac-

ities of their firms. As demonstrated by the analyses of Census Bureau data, above, discrimination may even prevent firms from forming in the first place.

There are extensive federal agency reports and much scholarly work on the relationship between personal wealth and successful entrepreneurship. There is a general consensus that disparities in personal wealth translate into disparities in business creation and ownership.¹⁹³ The most recent research highlights the magnitude of the COVID-19 pandemic's disproportionate impact on minority-owned firms.

1. Federal Reserve Board Small Business Credit Surveys¹⁹⁴

The Development Office of the 12 Reserve Banks of the Federal Reserve System has conducted Small Business Credit Surveys ("SBCS") to develop data on small business performance and financing needs, decisions, and outcomes.

a. 2021 Report on Firms Owned by People of Color

i. Overview

The *2021 Report on Firms Owned by People of Color*¹⁹⁵ compiles results from the 2020 SBCS. The SBCS provides data on small business performance, financing needs, and decisions and borrowing outcomes.^{196,197} The Report provides results by four race/ethnicity categories: White, Black or African American, Hispanic or Latino, and Asian or Pacific Islander. For select key statistics, it also includes results for 4,531 non-employer firms, which are firms with no employees on payroll other than the owner(s) of the business.

Patterns of geographic concentration emerged among small business ownership by race and ethnicity. This was important given the progressive geographic spread of the novel coronavirus throughout 2020 and variations in state government responses to limit its spread. The Report found that 40% of Asian-owned small employer firms are in the Pacific census division, and another 28% are in the Middle Atlantic. Early and aggressive efforts by the impacted states may have affected the reve-

193. See, e.g., Evans, David S. and Jovanovic, Boyan, "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints," *Journal of Political Economy*, Vol. 97, No. 4, 1989, pp. 808-827; David S. Evans and Linda S. Leighton, "Some empirical aspects of entrepreneurship," *The American Economic Review*, Vol. 79, No. 3, 1989, pp. 519-535.

194. This survey offers baseline data on the financing and credit positions of small firms before the onset of the pandemic. See [fedsmallbusiness.org](https://www.fedsmallbusiness.org).

195. <https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/sbcs-report-on-firms-owned-by-people-of-color>.

196. The SBCS is an annual survey of firms with fewer than 500 employees.

197. The 2020 SBCS was fielded in September and October 2020 and yielded 9,693 responses from small employer firms in all 50 states and the District of Columbia.

nue performance of Asian-owned firms in the aggregate given their geographic concentration. Black- and Hispanic-owned small employer firms are more concentrated in the South Atlantic region, which includes states with a mix of pandemic responses. For example, while Florida lifted COVID-19 restrictions relatively quickly, the South Atlantic includes states such as Maryland and North Carolina that maintained more strict guidelines.

The *Report* found that firms owned by people of color continue to face structural barriers in acquiring the capital, business acumen, and market access needed for growth. At the time of the 2020 SBCS – six months after the onset of the global pandemic – the U.S. economy had undergone a significant contraction of economic activity. As a result, firms owned by people of color reported more significant negative effects on business revenue, employment, and operations. These firms anticipated revenue, employment, and operational challenges to persist into 2021 and beyond. Specific findings are, as follows:

ii. Performance and Challenges

Overall, firms owned by people of color were more likely than White-owned firms to report that they reduced their operations in response to the pandemic. Asian-owned firms were more likely than others to have temporarily closed and to have experienced declines in revenues and employment in the 12 months prior to the survey. In terms of sales and the supply chain, 93% of Asian-owned firms and 86% of Black-owned firms reported sales declines as a result of the pandemic. Relative to financial challenges for the prior 12 months, firms owned by people of color were more likely than White-owned firms to report financial challenges, including paying operating expenses, paying rent, making payments on debt, and credit availability. Black-owned business owners were most likely to have used personal funds in response to their firms' financial challenges. Nearly half of Black-owned firms reported concerns about personal credit scores or the loss of personal assets. By contrast, one in five White-owned firms reported no impact on the owners' personal finances. Asian-owned firms were approximately twice as likely as White-owned firms to report that their firms were in poor financial condition.

iii. Emergency Funding

The *Report* found that PPP loans were the most common form of emergency assistance funding that firms sought during the period. Black- and Hispanic-owned firms were less likely to apply for a PPP loan. Only six in ten Black-owned firms actually applied. Firms owned by people of color were more likely than White-owned firms to report that they

missed the deadline or were unaware of the program. Firms owned by people of color were less likely than White-owned firms to use a bank as a financial services provider. Regardless of the sources at which they applied for PPP loans, firms that used banks were more likely to apply for PPP loans than firms that did not have a relationship with a bank. While firms across race and ethnicity were similarly likely to apply for PPP loans at large banks, White- and Asian-owned firms more often applied at small banks than did Black- and Hispanic-owned firms. Black-owned firms were nearly half as likely as White-owned firms to receive all of the PPP funding they sought and were approximately five times as likely to receive none of the funding they sought.

iv. Debt and Financing

Black-owned firms have smaller amounts of debt than other firms. About one in ten firms owned by people of color do not use financial services.

On average, Black-owned firms completed more financing applications than other applicant firms. Firms owned by people of color turned more often to large banks for financing. By contrast, White-owned firms turned more often to small banks. Black-owned applicant firms were half as likely as White-owned applicant firms to be fully approved for loans, lines of credit, and cash advances.

Firms owned by people of color were less satisfied than White-owned firms with the support from their primary financial services provider during the pandemic. Regardless of the owner's race or ethnicity, firms were less satisfied with online lenders than with banks and credit unions.

In the aggregate, 63% of all employer firms were non-applicants – they did not apply for non-emergency financing in the prior 12 months. Black-owned firms were more likely than other firms to apply for non-emergency funding in the 12 months prior to the survey. One-quarter of Black- and Hispanic-owned firms that applied for financing sought \$25,000 or less. In 2020, firms owned by people of color were more likely than White-owned firms to apply for financing to meet operating expenses. The majority of non-applicant firms owned by people of color needed funds but chose not to apply, compared to 44% of White-owned firms. Financing shortfalls were most common among Black-owned firms and least common among White-owned firms.

Firms of color, and particularly Asian-owned firms, were more likely than White-owned firms to have unmet funding needs. Just 13% of Black-owned firms received all of the non-emergency financing they

sought in the 12 months prior to the survey, compared to 40% of White-owned firms. Black-owned firms with high credit scores were half as likely as their White counterparts to receive all of the non-emergency funding they sought.

v. Findings for Non-employer Firms

Non-employer firms, those that have no paid employees other than the owner, represent the overwhelming majority of small businesses across the nation. In all, 96% of Black- and 91% of Hispanic-owned firms are non-employer firms, compared to 78% of White-owned and 75% of Asian-owned firms.¹⁹⁸

Compared to other non-employer firms, Asian-owned firms reported the most significant impact on sales as a result of the pandemic. They were most likely to report that their firm was in poor financial condition at the time of the survey.

Compared to other non-employer firms that applied for financing, Black-owned firms were less likely to receive all of the financing they sought. Black-owned non-employer firms that applied for PPP loans were less likely than other firms to apply at banks and more often turned to online lenders. Among PPP applicants, White-owned non-employer firms were twice as likely as Black-owned firms to receive all of the PPP funding they sought.

b. 2021 Small Business Credit Survey

The 2021 SBCS¹⁹⁹ reached more than 15,000 small businesses, gathering insights about the COVID-19 pandemic's impact on small businesses, as well as business performance and credit conditions. The Survey yielded 9,693 responses from a nationwide convenience sample of small employer firms with between one and 499 full- or part-time employees across all 50 states and the District of Columbia. The survey was fielded in September and October 2020, approximately six months after the onset of the pandemic. The timing of the survey is important to the interpretation of the results. At the time of the survey, the Paycheck Protection Program ("PPP") authorized by the Coronavirus Relief and Economic Security Act had recently closed applications, and prospects for additional stimulus funding were uncertain. Additionally, many government-mandated business closures had been lifted as the number of new COVID-19 cases plateaued in advance of a significant increase in cases by the year's end.

198. The Report notes that a future report will describe findings from the 2020 SBCS for non-employers in greater detail.

199. <https://www.fedsmallbusiness.org/medialibrary/FedSmallBusiness/files/2021/2021-sbcs-employer-firms-report>.

The 2020 survey findings highlight the magnitude of the pandemic's impact on small businesses and the challenges they anticipate as they navigate changes in the business environment. Few firms avoided the negative impacts of the pandemic. Furthermore, the findings reveal disparities in experiences and outcomes across firm and owner demographics, including race and ethnicity, industry, and firm size.

Overall, firms' financial conditions declined sharply and those owned by people of color reported greater challenges. The most important anticipated financial challenge differed by race and ethnicity of the owners. Among the findings for employer firms relevant to discriminatory barriers were the following:

- For Black-owned firms, credit availability was the top expected challenge, while Asian-owned firms disproportionately cited weak demand.
- The share of firms in fair or poor financial conditions varied by race: 79% of Asian-owned firms, 77% of Black-owned firms, 66% of Hispanic-owned firms and 54% of White-owned firms reported this result.
- The share of firms that received all the financing sought to address the impacts of the pandemic varied by race: 40% of White-owned firms received all the funding sought, but only 31% of Asian-owned firms, 20% of Hispanic-owned firms and 13% of Black-owned firms achieved this outcome.

c. 2018 Small Business Credit Survey

The 2018 SBCS²⁰⁰ focused on minority-owned firms. The analysis was divided into two types: employer firms and non-employer firms.

i. Employer firms

Queries were submitted to businesses with fewer than 500 employees in the third and fourth quarters of 2018. Of the 7,656 firms in the unweighted sample, five percent were Asian, ten percent were Black, six percent were Hispanic, and 79% were White. Data were then weighted by number of employees, age, industry, geographic location (census division and urban or rural location), and minority status to ensure that the data is representative of the nation's small employer firm demographics.²⁰¹

200. Small Business Credit Survey, <https://www.fedsmallbusiness.org/survey/2017/report-on-minority-owned-firms>.

Among the findings for employer firms relevant to discriminatory barriers were the following:

- Not controlling for other firm characteristics, fewer minority-owned firms were profitable compared to non-minority-owned firms during the past two years.²⁰² On average, minority-owned firms and non-minority-owned firms were about as likely to be growing in terms of number of employees and revenues.²⁰³
- Black-owned firms reported more credit availability challenges or difficulties obtaining funds for expansion—even among firms with revenues of more than \$1M. For example, 62% of Black-owned firms reported that obtaining funds for expansion was a challenge, compared to 31% of White-owned firms.²⁰⁴
- Black-owned firms were more likely to report relying on personal funds of owner(s) when they experienced financial challenges to fund their business. At the same time, White- and Asian-owned firms reported higher debt levels than Black- and Hispanic-owned firms.²⁰⁵
- Black-owned firms reported more attempts to access credit than White-owned firms but sought lower amounts of financing. Forty percent of Black-owned firms did not apply because they were discouraged, compared to 14% of White-owned firms.²⁰⁶
- Low credit score and lack of collateral were the top reported reasons for denial of applications by Black- and Hispanic-owned firms.²⁰⁷

ii. Non-employer firms²⁰⁸

Queries were submitted to non-employer firms in the third and fourth quarters of 2018. Of the 4,365 firms in the unweighted sample, five percent were Asian, 24% were Black, seven percent were Hispanic, and 64% were White. Data were then weighted by age, industry, geographic

201. *Id.* at 22. Samples for SBCS are not selected randomly. To control for potential biases, the sample data are weighted so that the weighted distribution of firms in the SBCS matches the distribution of the small firm population in the United States by number of employees, age industry, geographic location, gender of owner, and race or ethnicity of owners.

202. *Id.* at 3.

203. *Id.* at 4.

204. *Id.* at 5.

205. *Id.* at 6.

206. *Id.* at 9.

207. *Id.* at 15.

208. *Id.* at 18.

location (census division and urban or rural location), and minority status.²⁰⁹

Among the findings for non-employer firms relevant to discriminatory barriers were the following:

- Black-owned firms were more likely to operate at a loss than other firms.²¹⁰
- Black-owned firms reported greater financial challenges, such as obtaining funds for expansion, accessing credit and paying operating expenses than other businesses.²¹¹
- Black- and Hispanic-owned firms submitted more credit applications than White-owned firms.²¹²

d. 2016 Small Business Credit Surveys

The 2016 Small Business Credit Survey²¹³ obtained 7,916 responses from employer firms with race/ethnicity information and 4,365 non-employer firms in the 50 states and the District of Columbia. Results were reported with four race/ethnicity categories: White, Black or African American, Hispanic, and Asian or Pacific Islander.²¹⁴ It also reported results from woman-owned small employer firms, defined as firms where 51% or more of the business is owned by women, and compared their experiences with male-owned small employer firms.

The Report on Minority-Owned Businesses provided results for White-, Black- or African American-, Hispanic-, and Asian- or Pacific Islander-owned firms.

i. Demographics²¹⁵

The SBCS found that Black-, Asian-, and Hispanic-owned firms tended to be younger and smaller in terms of revenue size, and they were concentrated in different industries. Black-owned firms were concentrated in the healthcare and education industry sectors (24%). Asian-owned firms were concentrated in professional services and real estate (28%). Hispanic-owned firms were concentrated in non-manufacturing goods

209. *Id.* at 18.

210. *Id.*

211. *Id.* at 19.

212. *Id.* at 20.

213. <https://www.fedsmallbusiness.org/survey/2017/report-on-minority-owned-firms>.

214. When the respondent sample size by race for a survey proved to be too small, results were communicated in terms of minority vis-à-vis non-minority firms.

215. 2016 SBCS, at 2.

production and associated services industry, including building trades and construction (27%). White-owned firms were more evenly distributed across several industries but operated most commonly in the professional services industry and real estate industries (19%), and non-manufacturing goods production and associated services industry (18%).²¹⁶

ii. Profitability Performance Index²¹⁷

After controlling for other firm characteristics, the SBCS found that fewer minority-owned firms were profitable compared to non-minority-owned firms during the prior two years. This gap proved most pronounced between White- (57%) and Black-owned firms (42%). On average, however, minority-owned firms and non-minority-owned firms were nearly as likely to be growing in terms of number of employees and revenues.

e. Financial and Debt Challenges/Demands²¹⁸

The number one reason for financing was to expand the business or pursue a new opportunity. Eighty-five percent of applicants sought a loan or line of credit. Black-owned firms reported more attempts to access credit than White-owned firms but sought lower amounts of financing.

Black-, Hispanic-, and Asian-owned firms applied to large banks for financing more than they applied to any other sources of funds. Having an existing relationship with a lender was deemed more important to White-owned firms when choosing where to apply compared to Black-, Hispanic- and Asian-owned firms.

The SBCS also found that small Black-owned firms reported more credit availability challenges or difficulties for expansion than White-owned firms, even among firms with revenues in excess of \$1M. Black-owned firm application rates for new funding were ten percentage points higher than White-owned firms; however, their approval rates were 19 percentage points lower. A similar but less pronounced gap existed between Hispanic- and Asian-owned firms compared with White-owned firms. Of those approved for financing, only 40% of minority-owned firms received the entire amount sought compared to 68% of non-minority-owned firms, even among firms with comparably good credit scores.

216. *Id.* Forty-two percent of Black-owned firms, 21% of Asian-owned firms, and 24% of Hispanic-owned firms were smaller than \$100K in revenue size compared with 17% of White-owned firms.

217. *Id.* at 3-4.

218. *Id.* at 8-9; 11-12; 13; 15.

Relative to financing approval, the SBCS found stark differences in loan approvals between minority-owned and White-owned firms. When controlling for other firm characteristics, approval rates from 2015 to 2016 increased for minority-owned firms and stayed roughly the same for non-minority-owned firms. Hispanic- and Black-owned firms reported the highest approval rates at online lenders.²¹⁹

Low credit score and lack of collateral were the top reported reasons for denial of Black- and Hispanic-owned firms' applications. Satisfaction levels were lowest at online lenders for both minority- and non-minority-owned firms. A lack of transparency was cited as one of the top reasons for dissatisfaction for minority applicants and borrowers.

Forty percent of non-applicant Black-owned firms reported not applying for financing because they were discouraged (expected not to be approved), compared with 14% of White-owned firms. The use of personal funds was the most common action taken in response to financial challenges, with 86% of Black-owned firms, 77% of Asian-owned firms, 76% of White-owned firms, and 74% of Hispanic-owned firms using this as its source.

A greater share of Black-owned firms (36%) and of Hispanic-owned firms (33%) reported existing debt in the past 12 months of less than \$100,000, compared with 21% of White-owned firms and 14% of Asian-owned firms. Black-owned firms applied for credit at a higher rate and tended to submit more applications, compared with 31% of White-owned firms. Black-, Hispanic-, and Asian-owned firms applied for higher-cost products and were more likely to apply to online lenders compared to White-owned firms.

i. Business Location Impact²²⁰

Controlling for other firm characteristics, minority-owned firms located in low-income minority zip codes reported better credit outcomes at large banks, compared with minority-owned firms in other zip codes. By contrast, at small banks, minority-owned firms located in low- and moderate-income minority zip codes experienced lower approval rates than minority-owned firms located in other zip codes.

ii. Non-employer Firms²²¹

Non-employer firms reported seeking financing at lower rates and experienced lower approval rates than employer firms, with Black-owned non-employer firms and Hispanic-owned non-employer firms

219. The share of minority-owned firms receiving at least some financing was lower across all financing products, compared with non-minority firms.

220. *Id.* at 17.

221. *Id.* at 21.

experiencing the most difficulty. White-owned non-employer firms experienced the highest approval rates for new financing, while Black-owned non-employer firms experienced the lowest approval rates for new financing.

2. The New York Federal Reserve Board’s 2016 Report on Woman-Owned Businesses²²²

The Report on Woman-Owned Businesses provides results from woman-owned small employer firms where 51% or more of the business is owned by women. These data compared the experience of these firms compared with male-owned small employer firms.

a. Firm Characteristics: Woman-Owned Firms Start Small and Remain Small and Concentrate in Less Capital-Intensive Industries²²³

The SBCS found that 20% of small employer firms were woman-owned, compared to 65% male-owned and 15% equally owned. Woman-owned firms generally had smaller revenues and fewer employees than male-owned small employer firms. These firms tended to be younger than male-owned firms.

Woman-owned firms were concentrated in less capital-intensive industries. Two out of five woman-owned firms operated in the healthcare and education or professional services and real estate industries. Male-owned firms were concentrated in professional services, real estate, and non-manufacturing goods production and associated services.²²⁴

b. Profitability Challenges and Credit Risk Disparities²²⁵

Woman-owned firms were less likely to be profitable than male-owned firms. These firms were more likely to report being medium or high credit risk compared to male-owned firms. Notably, gender differences by credit risk were driven by woman-owned startups. Among firms older than five years, credit risk was indistinguishable by the owner’s gender.

222. <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2016/SBCS-Report-WomenOwnedFirms-2016.pdf>.

223. 2016 SBCS, at 1-5.

224. Non-manufacturing goods production and associated services refers to firms engaged in Agriculture, Forestry, Fishing, and Hunting; Mining, Quarrying, and Oil and Gas Extraction; Utilities; Construction; Wholesale Trade; Transportation and Warehousing (NAICS codes: 11, 21, 22, 23, 42, 48-49).

225. *Id.* at 6-7.

c. Financial Challenges During the Prior Twelve Months²²⁶

Woman-owned firms were more likely to report experiencing financial challenges in the prior twelve months: 64% compared to 58% of male-owned firms. They most frequently used personal funds to fill gaps and make up deficiencies. Similar to male-owned firms, woman-owned firms frequently funded operations through retained earnings. Ninety percent of woman-owned firms relied upon the owner's personal credit score to obtain financing.

d. Debt Differences²²⁷

Sixty-eight percent of woman-owned firms had outstanding debt, similar to that of male-owned firms. However, woman-owned firms tended to have smaller amounts of debt, even when controlled for the revenue size of the firm.

e. Demands for Financing²²⁸

Forty-three percent of woman-owned firms applied for financing. Woman-owned applicants tended to seek smaller amounts of financing even when their revenue size was comparable.

Overall, woman-owned firms were less likely to receive all financing applied for compared to male-owned firms. Woman-owned firms received a higher approval rate for U.S. Small Business Administration loans compared to male-owned firms. Low-credit, woman-owned firms were less likely to be approved for business loans than their male counterparts with similar credit (68% compared to 78%).

f. Firms That Did Not Apply for Financing²²⁹

Woman-owned firms reported being discouraged from applying for financing for fear of being turned down at a greater rate: 22% compared to 15% for male-owned firms. Woman-owned firms cited low credits scores more frequently than male-owned firms as their chief obstacle in securing credit. By contrast, male-owned businesses were more likely to cite performance issues.

226. *Id.* at 8.
227. *Id.* at 10.
228. *Id.* at 16.
229. *Id.* at 14.

g. Lender Satisfaction²³⁰

Woman-owned firms were most consistently dissatisfied by lenders' lack of transparency and by long waits for credit decisions. However, they were notably more satisfied with their borrowing experiences at small banks rather than large ones.

3. 2010 Minority Business Development Agency Report²³¹

The 2010 Minority Business Development Agency Report, "Disparities in Capital Access Between Minority and non-Minority Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs", summarizes results from the Kauffman Firm Survey, data from the U.S. Small Business Administration's Certified Development Company/504 Guaranteed Loan Program and additional extensive research on the effects of discrimination on opportunities for minority-owned firms. The report found that

low levels of wealth and liquidity constraints create a substantial barrier to entry for minority entrepreneurs because the owner's wealth can be invested directly in the business, used as collateral to obtain business loans or used to acquire other businesses.²³²

It also found, "the largest single factor explaining racial disparities in business creation rates are differences in asset levels."²³³

Some additional key findings of the Report include:

- *Denial of Loan Applications.* Forty-two percent of loan applications from minority firms were denied compared to 16% of loan applications from non-minority-owned firms.²³⁴
- *Receiving Loans.* Forty-one percent of all minority-owned firms received loans compared to 52% of all non-minority-owned firms. MBEs are less likely to receive loans than non-minority-owned firms regardless of firm size.²³⁵

230. *Id.* at 26.

231. Robert W. Fairlie and Alicia Robb, Disparities in Capital Access Between Minority and non-Minority Businesses: The Troubling Reality of Capital Limitations Faced by MBEs, Minority Business Development Agency, U.S. Department of Commerce, 2010. <https://archive.mbda.gov/sites/mbda.gov/files/migrated/files-attachments/DisparitiesinCapitalAccessReport.pdf>.

232. *Id.* at 17.

233. *Id.* at 22.

234. *Id.* at 5.

235. *Id.*

- *Size of Loans.* The size of the loans received by minority-owned firms averaged \$149,000. For non-minority-owned firms, loan size averaged \$310,000.
- *Cost of Loans.* Interest rates for loans received by minority-owned firms averaged 7.8%. On average, non-minority-owned firms paid 6.4% in interest.²³⁶
- *Equity Investment.* The equity investments received by minority-owned firms were 43% of the equity investments received by non-minority-owned firms even when controlling for detailed business and owner characteristics. The differences are large and statistically significant. The average amount of new equity investments in minority-owned firms receiving equity is 43% of the average of new equity investments in non-minority-owned firms. The differences were even larger for loans received by high sales firms.²³⁷

4. Federal Reserve Board Surveys of Small Business Finances

The Federal Reserve Board and the U.S. Small Business Administration have conducted surveys of discrimination in the small business credit market for years 1993, 1998 and 2003.²³⁸ These Surveys of Small Business Finances are based on a large representative sample of firms with fewer than 500 employees. The main finding from these Surveys is that MBEs experience higher loan denial probabilities and pay higher interest rates than White-owned businesses, even after controlling for differences in credit worthiness and other factors. Blacks, Hispanics and Asians were more likely to be denied credit than Whites, even after controlling for firm characteristics like credit history, credit score and wealth. Blacks and Hispanics were also more likely to pay higher interest rates on the loans they did receive.²³⁹

5. 2022 National Community Reinvestment Coalition Disinvestment Discouragement and Inequity in Small Business Lending

As part of an effort to obtain business data on small business lending, the National Community Reinvestment Coalition (“NCRC”) conducted a study of discrimination in small business lending. Of note for this Report, it used mys-

236. *Id.*

237. *Id.*

238. <https://www.federalreserve.gov/pubs/oss/oss3/nssbftoc.htm>. These surveys have been discontinued. They are referenced to provide some historical context.

239. See Blanchflower, D. G., Levine, P. and Zimmerman, D., “Discrimination In The Small Business Credit Market,” *Review of Economics and Statistics*, (2003); Cavalluzzo, K. S. and Cavalluzzo, L. C. (“Market structure and discrimination, the case of small businesses,” *Journal of Money, Credit, and Banking*, (1998).

tery shoppers to examine differences in customer service experiences for potential borrowers of different races in Los Angeles during 2018.²⁴⁰

Mystery shopping or testing is a commonly used tool to uncover problems in banks' business practices and policies. Mystery shoppers (testers) of different races and/or genders are sent into lending institutions posing as well-qualified borrowers with similar credit profiles. Testers inquire about loan products and then evaluate differences in treatment during their customer service experience.

For this case study, matched-pair mystery shopping tests were conducted in Los Angeles at 32 bank branch locations in census areas with less than 25% minority residents. The purpose of the research was to determine the baseline customer service level that minority and non-minority testers received when seeking information about small business loans. Testers were trained extensively on business and banking terminology and loan products. Testers arrived at the banks with nearly identical business profiles and strong credit histories to inquire about a small business loan product to expand their business.

Bank personnel introduced themselves to White testers 18% more frequently than they did to Black testers, and White testers received friendlier service overall. Black and Hispanic testers received more requests to provide additional information than their White counterparts. White testers were given significantly better information about business loan products, particularly information concerning loan fees. White testers were told what to expect 44% more frequently than Hispanic testers and 35% more frequently than Black testers. One area of customer service was significantly better for Black and Hispanic testers: they received an offer to schedule an appointment to take their application 18% more frequently for Black testers and 12% more frequently for Hispanic testers than White testers. While the customer service experience of all applicants for small business credit is poor, regardless of race and nationality, it is even worse for Black and Hispanic applicants. They were asked to provide more documentation and given less information about loan terms than their White counterparts. This disproportionate pattern of lower quality service for Black and Hispanic testers could discourage minority entrepreneurs from seeking access to capital. The NCRC concludes that banks must develop a comprehensive approach to addressing fair lending issues and building customer service standards in their small business lending operations.

240. The work undertaken in the report expands upon earlier NCRCO research report. See Sterling A. Bone, et al., *Policy Watch: Shaping Small Business Lending Policy Through Matched Pair Mystery Shopping*, Journal of Public Policy & Marketing 1-9 (2019) at <https://bit.ly/2qAmNT7>

6. Other Reports

- Dr. Timothy Bates found venture capital funds focusing on investing in minority firms provide returns that are comparable to mainstream venture capital firms.²⁴¹
- According to the analysis of the data from the Kauffman Firm Survey, minority-owned firms' investments into their own firms were about 18% lower in the first year of operations compared to those of non-minority-owned firms. This disparity grew in the subsequent three years of operations, where minorities' investments into their own firms were about 36% lower compared to those of non-minority-owned firms.²⁴²
- Another study by Fairlie and Robb found minority entrepreneurs face challenges (including lower family wealth and difficulty penetrating financial markets and networks) directly related to race that limit their ability to secure financing for their businesses.²⁴³

E. Evidence of Disparities in Access to Human Capital

There is a strong intergenerational correlation with business ownership. The probability of self-employment is significantly higher among the children of the self-employed. A generational lack of self-employment capital disadvantages minorities, whose earlier generations were denied business ownership through either *de jure* segregation or *de facto* exclusion.

There is evidence that current racial patterns of self-employment are in part determined by racial patterns of self-employment in the previous generation.²⁴⁴ Black men have been found to face a “triple disadvantage” in that they are less likely than White men to: 1. Have self-employed fathers; 2. Become self-employed if their fathers were not self-employed; and 3. To follow their fathers into self-employment.²⁴⁵

Intergenerational links are also critical to the success of the businesses that do form.²⁴⁶ Working in a family business leads to more successful firms by new own-

241. See Bates, T., “Venture Capital Investment in Minority Business,” *Journal of Money Credit and Banking* 40, 2-3 (2008).
 242. Fairlie, R.W. and Robb, A., *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*, (Cambridge: MIT Press, 2008).
 243. Fairlie, R.W. and Robb, A., *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*, (Cambridge: MIT Press, 2008).
 244. Fairlie, R.W., “The Absence of the African-American Owned Business, An Analysis of the Dynamics of Self-Employment,” *Journal of Labor Economics*, Vol. 17, 1999, pp 80-108.
 245. Hout, M. and Rosen, H. S., “Self-employment, Family Background, and Race,” *Journal of Human Resources*, Vol. 35, No. 4, 2000, pp. 670-692.

ers. One study found that only 12.6% of Black business owners had prior work experiences in a family business as compared to 23.3% of White business owners.²⁴⁷ This creates a cycle of low rates of minority ownership and worse outcomes being passed from one generation to the next, with the corresponding perpetuation of advantages to White-owned firms.

Similarly, unequal access to business networks reinforces exclusionary patterns. The composition and size of business networks are associated with self-employment rates.²⁴⁸ The U.S. Department of Commerce has reported that the ability to form strategic alliances with other firms is important for success.²⁴⁹ Minorities and women in our interviews reported that they felt excluded from the networks that help to create success in their industries.

F. Conclusion

The economy-wide data, taken as a whole, paint a picture of systemic and endemic inequalities in the ability of firms owned by minorities and women to have full and fair access to Central Health's contracts and associated subcontracts. This evidence supports the conclusion that absent the use of narrowly tailored contract goals, these inequities create disparate impacts on M/WBEs.

246. Fairlie, R.W. and Robb, A., "Why Are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital," *Journal of Labor Economics*, Vol. 24, No. 2, 2007, pp. 289-323.

247. *Id.*

248. Allen, W. D., "Social Networks and Self-Employment," *Journal of Behavioral and Experimental Economics (formerly The Journal of Socio-Economics)*, Vol. 29, No. 5, 2000, pp. 487-501.

249. "Increasing MBE Competitiveness through Strategic Alliances" (Minority Business Development Agency, 2008).

V. QUALITATIVE EVIDENCE OF RACE AND GENDER BARRIERS IN CENTRAL HEALTH'S MARKET AREA

In addition to quantitative data, a disparity study should further explore anecdotal evidence of experiences with discrimination in contracting opportunities. This evidence is relevant to whether M/WBEs face discriminatory barriers to their full and fair participation in Central Health's opportunities. Anecdotal evidence also sheds light on the likely efficacy of using only race- and gender-neutral remedies designed to benefit all small contractors to combat discrimination. As discussed in the Legal Chapter, this type of anecdotal data has been held by the courts to be relevant and probative of whether an agency may use narrowly tailored M/WBE contract goals to remedy the effects of past and current discrimination and create a level playing field for contract opportunities for all firms.

The Supreme Court has held that anecdotal evidence can be persuasive because it brings "the cold [statistics] convincingly to life."²⁵⁰ Evidence about discriminatory practices engaged in by prime contractors, agency personnel, and other actors relevant to business opportunities has been found relevant regarding barriers both to minority firms' business formation and to their success on governmental projects.²⁵¹ The courts have held that while anecdotal evidence is insufficient standing alone, "[p]ersonal accounts of actual discrimination or the effects of discriminatory practices may, however, vividly complement empirical evidence. Moreover, anecdotal evidence of a [government's] institutional practices that exacerbate discriminatory market conditions are [sic] often particularly probative."²⁵² "[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."²⁵³

250. *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

251. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1168-1172 (10th Cir. 2000), cert. granted, 532 U.S. 941, then dismissed as improvidently granted, 534 U.S. 103 (2001).

252. *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1120, 1530 (10th Cir. 1994).

253. *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 926 (11th Cir. 1997).

There is no requirement that anecdotal testimony be “verified” or corroborated, as befits the role of evidence in legislative decision-making, as opposed to judicial proceedings. In finding the State of North Carolina’s Historically Underutilized Business (“HUB”) program to be constitutional, the court of appeals opined that “[p]laintiff offers no rationale as to why a fact finder could not rely on the State’s ‘unverified’ anecdotal data. Indeed, a fact finder could very well conclude that anecdotal evidence need not—indeed cannot—be verified because it is nothing more than a witness’ narrative of an incident told from the witness’ perspective and including the witness’ perception.”²⁵⁴ 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.”²⁵⁵

A. Business Owner Interviews

To explore this type of anecdotal evidence of possible discrimination against minorities and women in the Central Health’s geographic and industry markets, we conducted two small group interviews, totaling 13 participants. We sought to explore their experiences in seeking and performing public sector prime contracts and subcontracts with the agency, other government agencies, and in the private sector. We also elicited recommendations for increased opportunities to compete for Central Health work.

Several minority or female owners reported they face biased and negative assumptions about their qualifications and capabilities.

There is not even the opportunity to see who you are, who you know, or what you have done or what you studied or anything like that.

The fact that I have this degree and that degree and this degree and that degree and can tell them, I'm probably more trained than most people in the room on this subject matter, but they always kind of see you as, or once again, maybe my perception, but they really view you in this very limited space.... At least respect my opinion or a respect the viewpoint I'm coming from.

You have to show yourself approved, before when others do not. Others don't have to prove themselves. And I feel like we had to prove ourselves for the last four years before people were like, "ah, okay,

254. *H.B. Rowe Co., Inc. v. Tippett*, 615 F.3d 233, 249 (4th Cir. 2010).

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

they're integral, they do what they said they were going to do. They, their reporting is exemplary."

Some women felt that they face barriers because of their gender.

It's a very good old boy network.

Have never filed a sexual harassment, a discrimination suit against an employer, I had never complained, I've sucked it up because a woman in a non-traditional male oriented, you don't do that and still get a job someplace else.

What we all want is a seat at the table. It doesn't matter beyond that, what color we are, what gender we are, anything like that. We want that opportunity to get that seat at the table and to be able to compete fairly. And there is an assumption when you walk in, particularly for a woman in a male dominated industry like construction, and often the vibe is that they are just there to check the box.

Race was seen as a bigger barrier than gender by some interviewees.

I have known White females that are very capable and successful as consultants. I have met African American women who tried to start their own company. I have never known one that's succeeded, because they just cannot get work. I have met several Hispanic and African American people, personally, who tried and never succeeded. And there are a few of us who are trying to make it.

One MBE stated that Central Health's attempts to utilize minority firms was perfunctory.

[Central Health's utilization of MBEs] is reactionary when you feel either governmental, or pressure from Council, or whatever else. And there's just enough heat, and then you bring in [the minority firm].... We're going to occupy space to keep you out of trouble. But the group that we're supposedly reaching is not necessarily important to you other than to maintain your funding.

Others reported a more positive experience.

They're working really hard right now to figure out what is the fair thing to do. So, I'm giving them credit for that.

One thing that we have found is we can really give our point of view and they listen. They may not like how we presented, because sometimes we presented nicely, sometimes we don't. One thing that they are clear on and they understand, is that even though you are

contracted with us, we represent the community and we still will fight the community with you as our, as being your vendor.

The commitment of senior leadership was seen as key to opening doors for M/WBEs.

It's not going to really change. If you don't have individuals in-house that are going to advocate for it.

Obtaining information about solicitations was reported by some interviewees to be especially difficult.

The procurement process I said it's the Wizard of Oz of our work. No one knows exactly who to contract, we don't know what specific certifications are needed, what steps are in the process or even where you stand. Literally, we respond to the RFPs if we know where to find it, if it happens to come to us in time. So then, we do all the work to respond and then we shoot this out to this phantom and ... it's always, "Well, it's in procurement. Well, who is that? Well, it's in procurement. Well, where are we in the phase? Well, it's in procurement."

More outreach and access to information were recommendations to increase opportunities for M/WBEs.

A public relations component and notification process is essential to having a successful outcome in the number of minority businesses that participate in your procurement process.

B. Additional Anecdotal Data from Texas Disparity Studies

We include below additional anecdotal information from the recent disparity studies conducted by Colette Holt & Associates for various Texas governments. Although not dispositive, these reports corroborate the barriers faced by minorities and women in the Austin area and overall Texas marketplace.

This summary of anecdotal reports provides an overview of the following Disparity Studies: Travis County 2021 ("Travis County"); the City of Arlington 2020 ("Arlington"); the City of Fort Worth 2020 ("Fort Worth"); Harris County 2020 ("Harris County"); the Dallas Fort Worth International Airport 2019 ("DFW"); Texas Department of Transportation 2019 ("TxDOT"); Dallas County 2015 ("Dallas County"); and Parkland Health and Hospital System 2015 ("PHHS").

1. Discriminatory Attitudes and Negative Perceptions of Competency and Professionalism

Biases about the capabilities of minority and woman business owners impact all aspects of their attempts to obtain contracts and to be treated equally in performing contract work. The prevailing viewpoint is that M/WBEs and smaller firms are less qualified and capable.

I believe Black businesses are stereotyped as less than equipped for major projects. (Travis County, page 200)

My whole time as an MBE/HUB consultant [my competency has been questioned.] (Travis County, page 203)

Until we received SBA funding, we were unable to get a loan of more than 10% of last year's revenue, which wasn't sufficient to scale our business. (Travis County, page (205)

Racism still exists and the construction industry is one that still has a lot of small to mid-size businesses that still discriminate. (Travis County, page 200)

It's a daily struggle [against racial harassment]. I have to hide the fact that I'm Black and female in order to even to be considered. (Travis County, page 200)

I work in tech and experience a variety of gender-related harassment as a matter of course. (Travis County, page 202)

Received questioning of competency on ability and knowledge in landscape construction during installation of a major project. Not uncommon for another contractor or sub to avoid asking a female on our team by asking a male on our team. (Travis County, page 202)

I've been told not to mention that we are a HUB/WOSB because we will not be taken seriously. (Travis County, page 203)

One of the biggest general contractors in this part of Texas got up and says, "I don't want to do business with [minorities].... The only reason why I'm here is because I got a contract and the state is paying for it, or else I wouldn't be doing business with you. (Harris County, page 95)

Stigma sometimes can come from leading your marketing with M/WBE status, and that's a quick way to [not get work]. (DFW, page 158)

Sometimes, I choose not to present myself as a minority contractor.... Obviously, when people meet me, [being an MBE] they assume certain things. As they get to know me and understand that I can speak construction, that I'm bilingual, that I speak engineering, then I get the comment, "Oh, you're different." Or, "You're educated."... I do think that there is a stigma [to being an MBE]. (DFW, page 158)

I try not to use my accent. And treatment is completely different, completely different [if they think I am White]. (TxDOT, page 161)

[Agency staff and prime vendors] are looking down at you because you are a woman. Because you're a woman, you probably didn't know IT. (PHHS, page 107) There's still this stigma. "Well, I guess, you know, we'll see what the little girls are doing over there." (DFW, page 158)

There are many women owned businesses who are trying today to survive in the male-owned, if you want to say good old boy, Texas network. Many of us. And it does keep us down because of the perception of what the woman knows in math and science as you negotiate with engineers. (Dallas County, page 102)

When a White firm commits an offense, something goes wrong, they say run his ass off. Not the firm, but the architect or that manager who did a poor job. If it's an African American firm or Hispanic firm, run the company off. (PHHS, page 108)

People of color do not get the same credit even if their financials and credit scores are the same.... [A White man has] got a little bit more credit than you did. And then there was a slowdown in paid invoices, [he's] a big GC and he floats it because he's got a little more credit. And then people turn around, "Hey, that guy's a good business. Joe Man Black over here, Hispanic, he doesn't know how to manage his business." All he did was access his credit line. And if he would've had his credit line, he could do it, too. It's like he ain't stupid. If he had a credit line, he'd access it when he needs it.... So then, [non-M/WBEs] look like they're better business people, not because they're better business people, but because people are carrying them. (Fort Worth, page 137)

There's definitely on fees, an expectation, that if you are woman-owned or minority-owned firm, that you're going to do the work for less. Same work, for less. (Harris County, page 95)

Many women reported unfair treatment or sexual harassment in the business world.

I've had people ask if my husband started and/or runs the business. I'm single. (Travis County, page 201)

In general, [I] have to limit the networking activities we participate in to avoid potential sexual harassment situations with potential customers. (Travis County, page 200)

Fieldwork opportunities [are] sometimes not offered due to difficulty creating women-only overnight accommodations. (Travis County, page 203)

Sometimes I get statements like, "Are you sure you can do the work?" (TxDOT, page 162)

I've dealt with [TxDOT staff] that just thought I was dumb as dirt because I'm a woman, but this was a woman. (TxDOT, page 163)

I still do find the initial contact with specifically, a general contractor, there is somewhat that attitude of you're a woman, let me tell you how to do this. (TxDOT, page 162)

You get a lot of that. You're a woman, pat you on the head and say it's nice that you came today. Then, all the sudden, they'll be over there doing their thing and you sit there and hear what they're saying. You're like, that's not gonna be to code buddy and good luck with that. They look at you like; how do you know that? This is my job to know those things. (TxDOT, page 162)

I have offered to go out and market more for the company and... some guys that were sitting in the back, they said, "Well, we really need somebody very young and pretty and dresses very nice to go out and market, 'cause they get the attention." "Excuse me?" I think I can do a good job marketing, but I...don't meet those qualifications. (TxDOT, page 163)

I've had dinner encounters ... I've had a guy grab me at one of those... I definitely do make it a point to not ride with certain people that I don't feel comfortable with. (DFW, page 158)

2. Access to Formal and Informal Business and Professional Networks

Both minority and woman respondents reported difficulty in accessing networks and fostering relationships necessary for professional success and viability. This difficulty extended to agency staff; respondents were unable to gain access to, and communicate with, key agency decisionmakers. Business owners frequently stated that Texas is a “good old boy” state.

I believe it’s about who you know, so although I am HUB certified and applied for business opportunities, I believe I am still not given the information needed to help me execute the opportunity. (Travis County, page 204)

It is not difficult to get a sense that, for construction work, a preference exists for a male focused company to be the contractor or sub, particularly when the room is packed with males (example, a “get to know the prime” event). When standing in line to discuss a project with a prime, the men before and after have been given more time, discussion, sincerity, and contact info for additional work than our females have received from the GC’s reps at the event. It is not an isolated thing. (Travis County, page 203)

Large firms have the resources to donate money to local politicians and often receive information about opportunities that are not available to others. (Travis County, page 205)

Many large firms and clients believe HUB or DBE firms do not do good work. We are often looked down on because we have a HUB or DBE certification. (Travis County, page 203)

Vendor lack of experience with small businesses results in questioning a business’ capabilities. (Travis County, page 205)

Yes, based on history and experience, I have not had access to the same contracting opportunities that larger firms with more history in the area, larger workforces with marketing departments, and better name recognition. (Travis County, page 205)

The transportation industry as a whole is dominated by the civil engineers, which typically the folks graduating in civil engineering are White men. You have a very low proportion of women and minorities with those degrees. Inherently, then in the workplace, you're seeing very low amounts of diversity.

Same things in environmental services. You don't get a lot of women who are wildlife biologists. Someone with that type of experience typically has been hunting and fishing with his father and his grandpa their entire lives and they have a good old boys club. They go drinking, they go fishing, they go playing golf. (TxDOT, page 162)

You call and call and call [prime vendors] and you sort of feel like you're just bugging them. But they never call back. They never do anything. So, just seems like they're just used to doing business with the same companies and that's who they choose to do business with. (Harris County, page 100)

They still see women as a support system. They do not see us as business people. We are stepping out, and we are, women are coming on. Men, I hate to put it, y'all better get ready because the women are in the labor force, they're coming hard, and they're coming fast. (Fort Worth, page 136)

You're not in the frat. You didn't get the letter, you know? You didn't get the call. But whatever you need to do to get in, you need to figure it out. (Harris County, page 100)

[Texas is] a good old boy state. It is a fact of life whether you're a woman, small business, whatever. Ladies, the only way we get a chance is we have to legally stand up and demand that we get a fair trial, that we be put on a level playing field by having rules and regulations.... [Women] are always behind. We will always be behind in this state. (Dallas County, page 101)

We are always at a disadvantage because we are not in a situation where we can build these relationships. Going to the country club here and having lunch with the mayor and with all of the CEOs of the companies around here. So, the playing field is not level, and it is discriminatory because we're not in a position to build those relationships. (Arlington, page 143)

I've been raised in Fort Worth my whole life and so it's still very much a good old boys club here in Fort Worth. I spend 90% of my time in Dallas. And I live in Fort Worth. (Fort Worth, page 134)

I'm a lifelong Fort Worth resident and taxpayer and it's very disheartening that the City of Dallas has actually been a lot easier as a small minority business. There are certain aspects of the good old boys' club [you see] attending some of the pre-

bids. You do see a lot of kind of favoritism and partiality to the contractors that are there and some of the City officials. (Fort Worth, page 134)

In presenting the various options and moving forward from concept into detail design, sitting around a room, and except for maybe an architect, I was always the only woman at the table. It's an expertise that I've carried for many years, and literally, repeated to the owners of a government entity, would present the case and why this is the recommendation to move forward. And it would be silence in the room. And then, this junior, who was not even a licensed P[rofessional] E[ngineer] yet, working underneath of me, who helped me put the slides together, and did some of the analysis under my leadership, would – they'd ask a couple of questions, and this young man would answer the questions based on the slides and flipping back and forth. And then all of a sudden, the recommendation was accepted because this young man, who was my employee, was giving the answer instead of me. (Harris County, page 96)

My industry it is extremely male dominant... They say, "Oh, there's a girl, there's a woman. What is she here for? Who does she work for? ... That's [name]. Oh, she owns her own company. She's a little bitty company. She's nothing to worry about." Well, I'm going to be silent and deadly and they're going to watch because I'm coming. (Fort Worth, page 135)

The County and the hospital ... do tell you about the opportunities. The problem is you can't get into the inner circle [of agency decision makers]. (Dallas County, page 102)

[There is an] inability to get in front of the key decision makers [at the agencies].... I reached out to the executive assistant to the C[hief] I[nformation] O[fficer] and no one has responded at all. (PHHS, page 107)

3. Obtaining Work on an Equal Basis

Respondents reported that institutional and discriminatory barriers continue to exist in the Texas marketplace. They were in almost unanimous agreement that contract goals remain necessary to level the playing field and equalize opportunities. Race- and gender-neutral approaches alone are viewed as inadequate and unlikely to ensure a level playing field.

If it's not a project that has a goal, they're not bringing you to the table. (Dallas County, page 103)

There's no real aggressive movement on [the City's] part to recruit and require these plans to hire African Americans. (Arlington, page 144)

There is an entrenched bias in favor of the big company. They'll have the political connections, all that stuff... They don't want to risk anything. They've got the good old boys, they got the whole comfy thing. (Arlington, pages 144-145)

Unless there's goals in the project, there is no business for small business. And even then, they try to skirt around it. And they'll use my credentials to actually go for it and then excuse me. (Dallas County, page 103)

I have never had a contract with a general contractor in 36 years that's private. Everything is government, and if the government didn't say use a minority, they wouldn't do it. (Harris County, page 97)

Prime vendors see the goal as the ceiling, not as the floor. (Dallas County, page 103)

If you just looking at goals, goals in itself, without enforcements, it's not effective. (Harris County, page 101)

If it wasn't for that requirement, that MWB requirement, most of the businesses would probably have a very difficult time staying in business and my business, probably 80% of it [comes] just from these types of governmental projects that come along and it's no way that these primes would work with us ... on projects that did not have an MWB requirement. (Fort Worth, page 137)

If the program went away, what would happen? You would lose small businesses. One, if you don't have relationships, people do business with who they know. If we don't have a program that says that there has to be utilization, participation levels, whatever that is, DBE goals MBE goals, they won't use them. (Fort Worth, page 137)

Part of the problem is accountability... The State [of Texas] has told me, with regard to submitting bids for the Texas HUB requirement, that I need to go back to the contractor, but the contractor is the problem.... The government doesn't hold the contractor accountable. (Harris County, page 102)

The [City] work stopped as a result [of dropping Hispanic firms from the program]. It was not going to be helpful to [the prime proposer] to bring on my firm, because they wouldn't get any points in the grading of the proposals. So, therefore, I have not been able to do any work at all since. (Fort Worth, page 138)

If [prime vendors] think they can get away with it, without having goals, then they're going to self-perform or they're going to use the folks that they have relationships with. And those folks don't necessarily look like us. (Dallas County, page 103)

Until those [business relationships] are equal, you're going to have to keep on forcing numbers. And as quick as you force a number, they're going to come up with something to circumvent that number. (Dallas County, page 104)

[Prime contractors] are like, why do I need you? Why do I need to give you any money? It's not required of me to do it. So, you may have the greatest relationship with them in the world but those larger firms, if they don't need to check the box so to speak, they're not going to reach out and say, hey, I want to help grow you more because in their mind I just helped you on this job get this much money, you should be happy and let me go do what I need to do. (Dallas County, page 103)

Minority and female entrepreneurs were also concerned about the inability to get work due to longstanding relationships that predate contracting affirmative action programs.

[Larger White male-owned firms are] going to go and use the same company [with which they usually do business]. (PHHS, page 106)

[People] tend to do business with who they know and who they like, and they really don't care that they're supposed to [meet a goal]. (Dallas County, page 103)

And if you're not a DBE or HUB or SBE, you're not going to be considered for any work as a consultant for TxDOT because they're going to use these legacy firms for most of their work on the consulting side. (TxDOT study, page 164)

There's this systemic nature of doing business with people you know. And we all like to do business with people we know. We know that they'll come through. They'll be on time. They'll be under budget.... [But] the systemic aspect of familiarity for

others sometimes breeds contempt for the person trying to get in the door. (Fort Worth, page 133)

Respondents also maintained that prime contractors are not comfortable with minorities taking larger roles. They indicated that even M/WBEs who had accessed large public contracts through M/WBE programs did not translate into public sector work.

Do we really want to play this game and how much headache and how much headache do we want to deal with?... We employ 75 employees and I've had minorities grow through our organization. But the challenge that I have is now that we're able to bond single projects up to 15, 18 million dollars, I'm getting a bigger pushback.... When we can sit down and start talking business and how we're going to staff the job, going to put my bonding up, what's the duration and the schedule? [The large general contractors are] doing this, no, no, no [shaking head]. (Dallas County, page 104)

You get in a niche of being a DBE and you're automatically a sub.... We've had a lot of success in the DBE market and I'm not going to downplay that, but as a prime, we don't get a lot. We end up getting a smaller piece so you can do the hydraulics, or you can do the survey but the true design work for plan and profile on a street or something like that where we can actually show expertise in engineering, we're not given that piece of the pie. (Arlington, page 145)

[A general contractor, with which this MBE had worked on major project jobs, when approached about a private sector project, responded] "There's no MWBE [goal] on this." I said, "Wait a minute. We just worked together for five years. You know me." Yes, but there's not MWBE goals. I said, "You mean to tell me I can't do [scope]? It's right across the street from my headquarters." "Well, there's no MWBE goals." So, he's one of the good guys. (PHHS, page 109)

4. Suggestions to Reduce Barriers to Public Contracting

Respondents also suggested approaches to increasing M/WBE opportunities and capacities.

Come out with a mentoring program that's goal-oriented and visible. (PHHS, page 110)

A good mentor helps you with a lot of things that have nothing to do with that specific project but with your business. Helps you with your safety plan and quality control plans. (Dallas County, page 105)

My recommendation is that they start to do lunch and learn where you get to meet with that department for hours specific to your line of business and now you're able to have a true one-on-one conversation, or even in a group setting of their size where we can ask specific questions to understand how to respond to these RFQs, RFPs better, because as it stands right now, it's the generic and generic gets you nowhere because you don't know what a person expects. And we all have a concept of how we work, but if that's not what the person's looking for, we miss every time. (Arlington, page 146)

We've had a mentorship with [firm name] which has helped us immensely. Because I don't think we would have been able to walk through the doors or bid on the things that we've bid on or have the opportunity had we not had that mentorship. Because they had forged a path in places where I hadn't seen before. And I work in a very male dominated business in [specialty trade]. It's predominantly men. And there is some stigma with that. There are competency issues when you show up at a meeting and you're a woman and you're representing the [specialty trade] company. So, I'm really thankful for the mentorship program because I think it's just something that helps open doors. (PHHS, page 110)

I'm hearing a lot of positive feedback on mentor-protégé [initiatives]. Because you write a really good mentor-protégé agreement and you have a great mentor, you can really learn a lot. (Dallas County, page 105)

Houston Community College has a lot of money that they have to put programs together. And they said if we will just call them and tell them what program we want, and we can get, say, 10 to 15 people in there, they'll design the program. So, you could put a mentoring program together for anybody. (Harris County, page 103)

I have some experience with J[oint] V[entures] and mentor-protégé relationships and they work but it depends on who you're partnering with. It's just like with anything. A JV is like a marriage. (Dallas County, page 105)

Our challenge [with acting as joint venture partner with a majority-owned firm] that we have when we're sitting at the table [is] we're really not in a decision-making position [with the majority-owned partner]. (Dallas County, page 105)

There should be contracts from which] the big boys should be completely excluded. (Dallas County, page 106)

I'm a big fan of being a participant in mentor-protégé programs because you learn how to stay in business. (Harris County, page 103)

If the County were to follow any program on the civil side, it would be the State as opposed to the City. I think the State has a lot better program. They have lower goals, but they use commercially useful function. The City has no commercially useful function. They say they do, but they really don't. There's a lot of pass throughs because their goals are so high. A lot of pass throughs are used every day to meet the goals and to me that's not the purpose of what we're doing. (Harris County, page 106)

C. Conclusion

Consistent with other evidence reported in this Study, the business owner interviews and data from other Texas studies strongly suggest that minorities and women continue to suffer discriminatory barriers to full and fair access to contracts and associated subcontracts in the Austin market area in general and in accessing Central Health contracts in particular. Several M/WBEs reported negative perceptions and assumptions about their competency that reduced their ability to conduct business. Minorities and women still suffer from stereotyping and hostile environments. M/WBEs often had reduced opportunities to obtain contracts, and less access to formal and informal networks. A large number indicated that they were working well below their capacity.

Anecdotal evidence may “vividly complement” statistical evidence of discrimination. While not definitive proof that the agency may adopt race- and gender-conscious remedies for these impediments, the results of the qualitative data are the types of evidence that, especially when considered in conjunction with other evidence assembled, are relevant and probative of whether Central Health has a sufficient evidentiary basis to adopt race- and gender-conscious measures.



VI. RECOMMENDATIONS FOR A MINORITY- AND WOMAN- OWNED BUSINESS ENTERPRISE PROGRAM FOR CENTRAL HEALTH

The quantitative and qualitative data presented in this Study provide a thorough examination of whether minority- and woman-owned business enterprises (“M/WBEs”) operating in Central Health’s geographic and procurement markets have full and fair opportunities to compete for its prime contracts and associated subcontracts. As required by strict constitutional scrutiny, we analyzed evidence of such firms’ utilization by Central Health as compared to their availability in its market area, as well as business owners’ experiences in obtaining agency work. We further analyzed M/WBEs’ opportunities in the overall Austin area economy. These statistical and anecdotal data provide the evidence necessary to determine whether there is a strong basis in evidence that M/WBEs suffer discrimination in access to Central Health contracts on the basis of race or gender, and if so, what narrowly tailored remedies are appropriate.

The Study results support the conclusion that Central Health has a compelling interest in implementing a race- and gender-conscious contracting program. The record— both quantitative and qualitative— establishes that while M/WBEs, other than firms owned by Native Americans, have not experienced significant disparities in their access to agency contracts, their opportunities outside the agency, and in the private sector, continue to be constrained by race or gender. Further, the small number of contracts awarded during the Study period does not support the conclusion that of all the agencies in the Austin market area, Central Health has a contracting environment free from the effects of discrimination. For example, the high utilization of Black law firms resulted from the award of only three contracts in total, of which two went to Black-owned firms. We do not take from this, however, that Black firms enjoy equal opportunities to obtain contracts and to succeed compared to White firms. To the contrary, the findings in the economy-wide analyses in Chapter IV and the anecdotal data in Chapter V strongly suggest that Central Health should consider adopting a narrowly tailored M/WBE program to ensure all firms have equal access for its contracts and associated subcontracts.

Central Health has initiated some efforts to ensure a level the playing field, including providing information on how to conduct business with the agency and engaging in outreach efforts. Firms that have received Central Health contracts report excellent experiences. Importantly, the agency pays on time. However, more could be done. We therefore recommend the implementation of a program that contains the necessary elements for greater success in reducing barriers and that employs national best practices to increase inclusion in government contracting.

As a general matter, Central Health should model its program on the elements of the Disadvantaged Business Enterprise (“DBE”) Program for federally assisted transportation contracts.²⁵⁶ Courts have pointed to an agency’s reliance on Part 26 as a guide as evidence that the local agency’s program is constitutionally narrowly tailored and employs best practices.

Based on this case law and national best practices for M/WBE programs, we recommend the following elements of a narrowly tailored M/WBE program:

A. Implement Race- and Gender-Neutral Measures

The courts require that governments use race- and gender-neutral approaches to the maximum feasible extent to address identified discrimination. This is a critical element of narrowly tailoring the program, so that the burden on non-M/WBEs is no more than necessary to achieve the agency’s remedial purposes.

The following enhancements of the Central Health current efforts, based on the business owner interviews, the input from senior Central Health management, and national best standards for M/WBE programs, will help to meet these standards.

1. Implement an Electronic Contracting Data Collection, Monitoring and Notification System

A critical element of this Study and a major challenge was data collection of full and complete prime contract and associated subcontract records. In addition to hindering research, the lack of a system will also make it very difficult to monitor and enforce any new initiatives. Adopting a good system is the most critical first step that Central Health can take.

Central Health should immediately implement an existing electronic data collection system with the following functionality:

256. 49 C.F.R. Part 26.

- Full contact information for all firms, including email addresses, NAICS codes, race and gender ownership, and M/WBE and/or small business certification status.
- Contract/project-specific goal setting, using the data from this Study.
- Utilization plan capture for prime contractor submission of subcontractor utilization plans, including real-time verification of M/WBE certification status and NAICS codes, and proposed utilization/goal validation.
- Contract compliance for certified and non-certified prime contract and subcontract payments for all formally procured contracts for all tiers of all subcontractors, both M/WBEs and non-M/WBEs; verification of prompt payments to subcontractors; and information sharing between Central Health, prime vendors and subcontractors about the status of pay applications.
- Program report generation that provides data on utilization by industries, race, gender, dollar amount, procurement method, etc.
- An integrated email notification and reminder engine to inform contractors of required actions, including reporting mandates and dates.
- Outreach tools for eBlasts and related communications, and event management for tracking registration and attendance.
- Access by authorized Central Health staff, prime contractors and subcontractors to perform all necessary activities.

2. Create an Office of Business Diversity

Central Health should create an Office of Business Diversity to oversee all efforts towards contracting diversity and inclusion. This new Office should report directly to the Chief Executive Officer²⁵⁷ and have the same level of authority as other Departments. This independence will signal the importance of this function and provide it with the bureaucratic stature necessary to move new initiatives forward.

Staff should be responsible for the M/WBE program elements of the contract award process (outreach, goal setting, bid and proposal review for compliance, etc.) and the contract performance process (goal attainment, substitution reviews, prompt payment tracking, etc.). This will ensure that Central Health is

257. See 49 C.F.R. §26.45 (“You must have a DBE liaison officer, who shall have direct, independent access to your Chief Executive Officer concerning DBE program matters. The liaison officer shall be responsible for implementing all aspects of your DBE program. You must also have adequate staff to administer the program in compliance with this part.”).

following best practices for M/WBE programs. The new Office should work closely with other departments with contracting responsibilities.

3. Increase Vendor Outreach and Communication to M/WBEs and Small Firms

Central Health should conduct regularly scheduled vendor outreach events to provide information and address questions regarding upcoming opportunities, as well as facilitate “matchmaking” sessions between prime contractors and subcontractors. These events should include general fairs as well as meetings targeted towards specific industries or communities, *e.g.*, engineering projects. Several non-M/WBEs suggested in the interviews that they welcomed such opportunities, and they were very open to utilizing more minority and woman firms; they need help connecting with these businesses.

Further, as is the case with many governments, the Study revealed that M/WBEs are receiving few opportunities in several industry codes. We suggest that special outreach for larger projects be conducted to firms in those sectors so that they are aware of opportunities and can make connections with other vendors as subcontractors or joint venture partners. Activities could include targeted emails about future contracts, matchmaking events focusing on those industries, and identification of firms that are not currently certified, but might be eligible for inclusion, to encourage applications.

Publishing an annual contracting forecast of larger contracts will assist vendors to plan their work and form teams. This is especially helpful for small firms with limited marketing resources. Providing information about upcoming bid opportunities²⁵⁸ is one race- and gender-neutral measure that will assist all firms to access information.

Further, potential vendors requested training in how to do business with Central Health. In addition to developing written materials for its website, the agency should hold sessions and create training videos that provide information on all aspects of its contracting.

4. Consider Partnering with Other Agencies and Local Organizations to Provide Bonding, Financing and Technical Assistance Programs

Both M/WBEs and non-M/WBEs supported services to assist M/WBEs to increase their skills and capabilities. Bonding and financing programs assist small firms by providing loans and issuing surety bonds to certified contractors,

258. *See, for example*, the City of Chicago’s Buying Opportunities page. <https://www.chicago.gov/city/en/depts/dps/provdrs/contract/svcs/city-of-chicago-consolidated-buying-plan.html> [chicago.gov].

with low interest rates. The programs may also provide general banking services on favorable terms to applicant firms. In addition, technical assistance with critical business skills such as bidding, estimating, accounting, marketing, legal compliance, etc., could be made available in conjunction with the existing efforts of Austin area governments and organizations such as chambers of commerce, professional associations, community-based organizations, etc.

B. Implement Race- and Gender-Conscious Measures

1. Adopt an Overall, Aspirational Goal for a New M/WBE Program

Central Health should set an annual, overall target for M/WBE utilization on its contracts (prime contracts and subcontracts combined). The availability estimates in Chapter III should be the basis for consideration of the overall, annual spending target for agency funds. We found the weighted availability of M/WBEs to be 13.7%, which would support an overall goal of 14% for spending with certified firms across all industry categories.

2. Use the Study as the Starting Point in Setting Narrowly tailored Contract Goals

In addition to setting an overall, annual target, Central Health should use the Study's detailed unweighted availability estimates as the starting point for contract specific goals. As discussed in Chapter II of the Study, Central Health's constitutional responsibility is to ensure that a goal is narrowly tailored to the specifics of the project. The detailed availability estimates in the Study can serve as the starting point for contract goal setting. A high-quality contracting data collection, monitoring and notification system should include a goal setting module that Central Health should use as its data source. This methodology involves four steps:

- Weight the estimated dollar value of the scopes of the contract by six-digit NAICS codes, as determined during the process of creating the solicitation. To increase understanding and compliance, these industry codes could be listed in the solicitation as a guide to how the goal was determined and where the agency expects bidders to seek M/WBE participation. Good faith efforts could be defined as, among several other elements, an adequate solicitation of firms certified in these codes.
- Determine the unweighted availability of M/WBEs in those scopes as estimated in the Study.

- Calculate a weighted goal based upon the scopes and the availability of firms.
- Adjust the resulting percentage based on current market conditions.²⁵⁹

3. Adopt Narrowly Tailored Program Eligibility

Program eligibility should be limited to firms that have a business presence in the Austin market area, as established by this Study, or that can demonstrate that they have done business within that market area.²⁶⁰

Central Health’s new program should accept M/W/DBE certifications from the Texas Unified Certification Program, the State of Texas’ HUB program, and the City of Austin. It will be Central Health’s constitutional responsibility, to ensure that the certifications it accepts are from narrowly tailored programs with demonstrated integrity.

4. Employ Rigorous Compliance and Monitoring Policies and Procedures

In addition to ensuring that the new M/WBE program sets narrowly tailored goals and eligibility requirements, it is essential that Central Health adopt contract award and performance standards for program compliance and monitoring that are likewise narrowly tailored and embody best practices. In general, compliance and monitoring should include the following elements:

- Clearly delineated policies and forms by which a bidder or proposer can establish that it has either met the contract goal(s) or made good faith efforts to do so.
- Rules for how participation by certified firms will be counted towards the goal(s). A firm must perform a “commercially useful function” in order to be counted for goal attainment. The manner in which various types of goods or services will be credited towards meeting goals must be clearly spelled out (for example, whether full credit will be given for purchases from certified regular dealers or suppliers). Certified prime vendors should be permitted to count their self-performance towards meeting the contract goal.
- Contract monitoring policies, procedures and data collection processes. This must include tracking the utilization of certified and non-certified

259. For a thorough explanation of how to set legally defensible and narrowly tailored contract goals, visit www.contractgoal-setting.com.

260. Central Health’s market consists of Travis and Williamson Counties.

subcontractors at all tiers of performance and monitoring prompt payment obligations of prime contractors to subcontractors. Central Health staff must perform site visits to meet these requirements.

- Criteria and processes for how non-performing, certified firms can be substituted during performance.
- Contract closeout procedures and standards for sanctions for firms that fail to meet their contractual requirements under the program.
- A process to appeal adverse determinations under the program that meets due process standards.

5. Provide Training for all Central Health Staff with Contracting Responsibilities or Vendor Interface

These significant changes will require an agency-wide roll out of the new program, as well as training of all personnel with contracting and vendor management responsibilities. In addition to providing technical information on compliance, it is also an opportunity to reaffirm Central Health's commitment to business diversity and encourage all departments to buy into these values and objectives.

6. Provide Training for Vendors on the New Program

It will be important for Central Health to provide some formal training on these proposed new program elements. This could consist of web-based seminars that would answer questions such as who is eligible; how to become certified; how to meet goals or establish good faith efforts to do so; how to use the compliance monitoring system; prompt payment obligations; subcontractor substitution; and contract close out. Information should further cover resources to assist small businesses, such as loan programs, accessing local Procurement Technical Assistance Centers, and other support.

C. Develop Performance Standards

To meet the requirements of strict constitutional scrutiny and ensure that best practices in program administration continue to be applied, Central Health should conduct a full and thorough review of the evidentiary basis for a new M/WBE program approximately every five to seven years.

Central Health should develop quantitative performance measures for overall success of its race- and gender-neutral measures and any M/WBE program to evaluate the effectiveness of various approaches in reducing the systemic barriers

identified by the Study. In addition to meeting goals, possible benchmarks might be:

- Progress towards meeting the overall, annual M/WBE goal.
- The number of bids or proposals, industry and the dollar amount of the awards and the goal shortfall, where the bidder was unable to meet the goals and submitted good faith efforts to do so.
- The number, dollar amount and the industry code of bids or proposals rejected as non-responsive for failure to make good faith efforts to meet the goal.
- The number, industry and dollar amount of M/WBE substitutions during contract performance.
- Increased bidding by certified firms as prime vendors.
- Increased prime contract awards to certified firms.
- Increased “capacity” of certified firms, as measured by bonding limits, size of jobs, profitability, complexity of work, etc.
- Increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts.

D. Establish a Program Sunset Date

Central Health should adopt a sunset date for the M/WBE program unless reauthorized. This is a constitutional requirement to meet the narrow tailoring test that race- and gender-conscious measures be used only when necessary. A new disparity study should be commissioned in time to meet the sunset date.

APPENDIX A:

FURTHER EXPLANATION OF THE MULTIPLE REGRESSION ANALYSIS

As explained in the report, multiple regression statistical techniques seek to explore the relationship between a set of independent variables and a dependent variable. The following equation is a way to visualize this relationship:

$$DV = f(D, I, O)$$

where DV is the dependent variable; D is a set of demographic variables; I is a set of industry & occupation variables; and O is a set of other independent variables.

The estimation process takes this equation and transforms it into:

$$DV = C + (\beta_1 * D) + (\beta_2 * I) + (\beta_3 * O) + \mu$$

where C is the constant term; β_1 , β_2 and β_3 are coefficients, and μ is the random error term.

The statistical technique seeks to estimate the values of the constant term and the coefficients.

In order to complete the estimation, the set of independent variables must be operationalized. For demographic variables, the estimation used race, gender and age. For industry and occupation variables, the relevant industry and occupation were utilized. For the other variables, age and education were used.

A coefficient was estimated for each independent variable. The broad idea is that a person's wage or earnings is dependent upon the person's race, gender, age, industry, occupation, and education. Since this report examined Central Health, the analysis was limited to data from the Austin/Round Rock MSA, which consists of Bastrop, Caldwell, Hays, Travis, and Williamson counties. The coefficient for the new variable showed the impact of being a member of that race or gender in the metropolitan area.

APPENDIX B:

FURTHER EXPLANATION OF THE PROBIT REGRESSION ANALYSIS

Probit regression is a special type of regression analysis. Probit regression analysis is used to explore the determinants of business formation because the question of business formation is a “yes’ or “no” question: the individual does or does not form a business. Hence, the dependent variable (business formation) is a dichotomous one with a value of “one” or “zero”. This differs from the question of the impact of race and gender of wages, for instance, because wage is a continuous variable and can have any non- negative value. Since business formation is a “yes/no” issue, the fundamental issue is: how do the dependent variables (race, gender, etc.) impact the probability that a particular group forms a business? Does the race or gender of a person raise or lower the probability he or she will form a business and by what degree does this probability change? The standard regression model does not examine probabilities; it examines if the level of a variable (*e.g.*, the wage) rises or fall because of race or gender and the magnitude of this change.

The basic probit regression model looks identical to the basic standard regression model:

$$DV = f(D, I, O)$$

where DV is the dependent variable; D is a set of demographic variables; I is a set of industry and occupation variables; and O is a set of other independent variables.

The estimation process takes this equation and transforms it into:

$$DV = C + (\beta_1 * D) + (\beta_2 * I) + (\beta_3 * O) + \mu$$

where C is the constant term; β_1 , β_2 , and β_3 are coefficients, and μ is the random error term.

As discussed above, the dependent variable in the standard regression model is continuous and can take on many values while in the probit model, the dependent variable is dichotomous and can take on only two values: zero or one. The two models also differ in the interpretation of the independent variables’ coefficients, in the standard model, the interpretation is fairly straight-

forward: the unit change in the independent variable impacts the dependent variable by the amount of the coefficient.²⁶¹ However, in the probit model, because the model is examining changes in probabilities, the initial coefficients cannot be interpreted this way. One additional computation step of the initial coefficient must be undertaken in order to yield a result that indicates how the change in the independent variable affects the probability of an event (*e.g.*, business formation) occurring. For instance, with the question of the impact of gender on business formation, if the independent variable was WOMAN (with a value of 0 if the individual was male and 1 if the individual was female) and the additional computation chance of the coefficient of WOMAN yielded a value of -0.12, we would interpret this to mean that women have a 12 percent lower probability of forming a business compared to men.

261. The exact interpretation depends upon the functional form of the model.

APPENDIX C:

SIGNIFICANCE LEVELS

Many tables in this Report contain asterisks indicating that a number has statistical significance at 0.001, 0.01, or 0.05 levels (sometimes, this is presented as 99.9 percent; 99 percent and 95 percent, respectively) and the body of the report repeats these descriptions. While the use of the term seems important, it is not self-evident what the term means. This Appendix provides a general explanation of significance levels.

This Report seeks to address the question of whether or not non-Whites and White women received disparate treatment in the economy relative to White males. From a statistical viewpoint, this primary question has two sub-questions:

- What is the relationship between the independent variable and the dependent variable?
- What is the probability that the relationship between the independent variable and the dependent variable is equal to zero?

For example, an important question facing Central Health as it explores whether each racial and ethnic group and White women continue to experience discrimination in its markets is do non-Whites and White women receive lower wages than White men? As discussed in Appendix A, one way to uncover the relationship between the dependent variable (*e.g.*, wages) and the independent variable (*e.g.*, non-Whites) is through multiple regression analysis. An example helps to explain this concept.

Let us say, for example, that this analysis determines that non-Whites receive wages that are 35 percent less than White men after controlling for other factors, such as education and industry, which might account for the differences in wages. However, this finding is only an estimate of the relationship between the independent variable (*e.g.*, non-Whites) and the dependent variable (*e.g.*, wages) – the first sub-question. It is still important to determine how accurate the estimation is. In other words, what is the probability that the estimated relationship is equal to zero – the second sub-question.

To resolve the second sub-question, statistical hypothesis tests are utilized. Hypothesis testing assumes that there is no relationship between belonging to a particular demographic group and the level of economic utilization relative to White men (*e.g.*, non-Whites earn identical wages compared to White men

or non-Whites earn 0 percent less than White men). This sometimes is called the null hypothesis. We then calculate a confidence interval to find the probability that the observed relationship (*e.g.*, -35 percent) is between 0 and minus that confidence interval.²⁶² The confidence interval will vary depending upon the level of confidence (statistical significance) we wish to have in our conclusion. When a number is statistically significant at the 0.001 level, this indicates that we can be 99.9 percent certain that the number in question (in this example, -35 percent) lies outside of the confidence interval. When a number is statistically significant at the 0.01 level, this indicates that we can be 99.0 percent certain that the number in question lies outside of the confidence interval. When a number is statistically significant at the 0.05 level, this indicates that we can be 95.0 percent certain that the number in question lies outside of the confidence interval.

262. Because 0 can only be greater than -35 percent, we only speak of “minus the confidence level”. This is a one-tailed hypothesis test. If, in another example, the observed relationship could be above or below the hypothesized value, then we would say “plus or minus the confidence level” and this would be a two-tailed test.

APPENDIX D:

UNWEIGHTED AND WEIGHTED AVAILABILITY

Central to the analysis, under strict constitutional scrutiny, of an agency's contracting activity is understanding what firms could have received contracts. Availability has two components: unweighted availability and weighted availability. Below we define these two terms; why we make the distinction; and how to convert unweighted availability into weighted availability.

Defining Unweighted and Weighted Availability

Unweighted availability measures a group's share of all firms that could receive a contract or subcontract. If 100 firms could receive a contract and 15 of these firms are minority-owned, then MBE unweighted availability is 15 percent (15/100). *Weighted availability* converts the unweighted availability through the use of a weighting factor: the share of total agency spending in a particular NAICS code. If total agency spending is \$1,000,000 and NAICS Code AAAAAA captures \$100,000 of the total spending, then the weighting factor for NAICS code AAAAAA is 10 percent ($\$100,000/\$1,000,000$).

Why Weight the Unweighted Availability

It is important to understand *why* weighted availability should be calculated. A disparity study examines the overall contracting activity of an agency by looking at the firms that *received* contracts and the firms that *could have received* contracts. A proper analysis does not allow activity in a NAICS code that is not important an agency's overall spending behavior to have a disproportionate impact on the analysis. In other words, the availability of a certain group in a specific NAICS code in which the agency spends few of its dollars should have less importance to the analysis than the availability of a certain group in another NAICS code where the agency spends a large share of its dollars.

To account for these differences, the availability in each NAICS code is weighted by the agency's spending in the code. The calculation of the weighted availability compares the firms that received contracts (utilization) and the firms that could receive contracts (availability). Utilization is a group's share of total spending by an agency; this metric is measure in dollars, *i.e.*,

MBEs received 8 percent of all dollars spent by the agency. Since utilization is measured in dollars, availability must be measured in dollars to permit an “apples-to-apples” comparison.

How to Calculate the Weighted Availability

Three steps are involved in converting unweighted availability into weighted availability:

- Determine the unweighted availability
- Determine the weights for each NAICS code
- Apply the weights to the unweighted availability to calculate weighted availability

The following is a hypothetical calculation.

Table D-1 contains data on unweighted availability measured by the number of firms:

Table D-1

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/DBE	Total
AAAAAA	10	20	20	5	15	400	470
BBBBBB	20	15	15	4	16	410	480
CCCCCC	10	10	18	3	17	420	478
TOTAL	40	45	53	12	48	1230	1428

Unweighted availability measured as the share of firms requires us to divide the number of firms in each group by the total number of firms (the last column in Table D-1). For example, the Black share of total firms in NAICS code AAAAAA is 2.1 percent (10/470). Table D-2 presents the unweighted availability measure as a group’s share of all firms.

Table D-2

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/DBE	Total
AAAAAA	2.1%	4.3%	4.3%	1.1%	3.2%	85.1%	100.0%

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/DBE	Total
BBBBBB	4.2%	3.1%	3.1%	0.8%	3.3%	85.4%	100.0%
CCCCCC	2.1%	2.1%	3.8%	0.6%	3.6%	87.9%	100.0%
TOTAL	2.8%	3.2%	3.7%	0.8%	3.4%	86.1%	100.0%

Table D-3 presents data on the agency’s spending in each NAICS code:

Table D-3

NAICS	Total Dollars	Share
AAAAAA	\$1,000.00	22.2%
BBBBBB	\$1,500.00	33.3%
CCCCCC	\$2,000.00	44.4%
TOTAL	\$4,500.00	100.0%

Each NAICS code’s share of total agency spending (the last column in Table D-3) is the weight from each NAICS code that will be used in calculating the weighted availability. To calculate the overall weighted availability for each group, we first derive the every NAICS code component of a group’s overall weighted availability. This is done by multiplying the NAICS code weight by the particular group’s unweighted availability in that NAICS code. For instance, to determine NAICS code AAAAAA’s component of the overall Black weighted availability, we would multiply 22.2 percent (the NAICS code weight) by 2.1 percent (the Black unweighted availability in NAICS code AAAAAA). The resulting number is 0.005 and this number is found in Table D-4 under the cell which presents NAICS code AAAAAA’s share of the Black weighted availability. The procedure is repeated for each group in each NAICS code. The calculation is completed by adding up each NAICS component for a particular group to calculate that group’s overall weighted availability. Table D-4 presents this information:

Table D-4

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/DBE
AAAAAA	0.005	0.009	0.009	0.002	0.007	0.189
BBBBBB	0.014	0.010	0.010	0.003	0.011	0.285
CCCCCC	0.009	0.009	0.017	0.003	0.016	0.391
TOTAL	0.028	0.029	0.037	0.008	0.034	0.864

To determine the overall *weighted availability*, the last row of Table D-4 is converted into a percentage (*e.g.*, for the Black weighted availability: $0.028 * 100 = 2.8$ percent). Table D-5 presents these results.

Table D-5

Black	Hispanic	Asian	Native American	White Women	Non-MWBE	Total
2.8%	2.9%	3.7%	0.8%	3.4%	86.4%	100.0%