

Harris Health Disparity Study 2022



**HARRIS
HEALTH
SYSTEM**

CH COLETTE
HOLT
& ASSOCIATES

HARRIS 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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Table of Contents

I. Executive Summary	1
A. Summary of Strict Constitutional Standards Applicable to Harris Health’s M/WBE Program	1
B. Data Analyses of Harris Health’s Contracts	3
1. Utilization of M/WBEs on Harris Health’s Contracts	4
2. Availability of M/WBEs to Perform on Harris Health’s Contracts	8
3. Disparity Analyses of Harris Health’s Contracts	8
C. Analysis of Disparities in the Houston Area Economy	9
D. Qualitative Evidence of Race and Gender Barriers in Harris Health’s Market	11
E. Recommendations for Ensuring Equity in Harris Health’s Contracting Activities	11
1. Implement Race- and Gender-Neutral Measures	12
a. Implement an Electronic Contracting Data Collection, Monitoring and Notification System	12
b. Create a Senior Leadership Position to Oversee Business Diversity	13
c. Increase Vendor Outreach and Communication to M/WBEs and Small Firms	13
d. Consider Partnering with Other Agencies and Local Organizations to Provide Bonding, Financing and Technical Assistance Programs	14
2. Implement Race- and Gender-Conscious Measures	14
a. Adopt an Overall, Aspirational Goal for a New M/WBE Program	14
b. Use the Study as the Starting Point in Setting Narrowly Tailored Contract Goals	15
c. Adopt Narrowly Tailored Program Eligibility Standards	15
d. Implement Rigorous Compliance and Monitoring Policies and Procedures	15
e. Provide Training for Harris Health Staff with Contracting Responsibilities or Vendor Interface	16
f. Provide Training for Vendors on the New Program	16
3. Develop Performance Standards	17
4. Establish a Program Sunset Date	17
II. Legal Standards for Local Government Contracting Equity Programs	19
A. Summary of Constitutional Equal Protection Standards	19
B. Elements of Strict Constitutional Scrutiny	23
C. Establishing a “Strong Basis in Evidence” for a Harris Health Program for Minority- and Woman-Owned Businesses	27
1. Define Harris Health’s Market Area	30
2. Determine Harris Health’s Utilization of Minority- and Woman-Owned Businesses	30
3. Determine the Availability of Minority- and Woman-Owned Businesses in Harris Health’s Market Area	32
4. Examine Disparities between Harris Health’s Utilization of Minority- and Woman-Owned Businesses and the Availability of Minority- and Woman-Owned Businesses	36

5. Analyze Economy-Wide Evidence of Race- and Gender-Based Disparities in Harris Health’s Market	38
6. Evaluate Anecdotal Evidence of Race- and Gender-Based Barriers to Equal Opportunities in Harris Health’s Market	40
D. Narrowly Tailoring an M/WBE Program for Harris Health	41
1. Consider Race- and Gender-Neutral Remedies	42
2. Set Targeted M/WBE/HUB Goals	43
3. Ensure Flexibility of Goals and Requirements	44
4. Review Program Eligibility Over-Inclusiveness and Under-Inclusiveness	45
5. Evaluate the Burden on Third Parties	46
6. Review the Duration of the Program	48
III. Contract Data Analysis for Harris Health Systems.	49
A. Contract Data Overview	49
B. Harris Health’s Geographic and Product Market	50
1. Harris Health’s Final Contract Data File	50
2. Harris Health’s Geographic Market	53
C. Harris Health’s Utilization of M/WBEs in its Geographic Market	54
D. Harris Health’s Utilization of M/WBEs in its Product Market	57
E. The Availability of M/WBEs in Harris Health’s Geographic and Product Market	63
1. The Methodological Framework	63
2. The Availability Data and Results	65
F. Disparity Analysis of M/WBEs for Harris Health’s Contracts	71
G. Conclusion	72
IV. Analysis of Disparities in the Houston Metropolitan Area Economy.	73
A. Introduction	73
B. Disparate Treatment in the Houston Metropolitan Marketplace: Evidence from the Census Bureau’s 2015 - 2019 American Community Survey	75
1. All Industries Combined in the Houston Metropolitan Area	78
2. The Construction Industry in the Houston Metropolitan Area	81
3. The Construction-Related Services Industry in the Houston Metropolitan Area	83
4. The Goods Industry in Houston Metropolitan Area	85
5. The Services Industry in Houston Metropolitan Area	87
6. The Information Technology Industry in the Houston Metropolitan Area	89
7. Conclusion	91
C. Disparate Treatment in the Houston Metropolitan Area Marketplace: Evidence from the Census Bureau’s 2017 Annual Business Survey	91
1. All Industries	93
2. Construction	96
3. Professional, Scientific and Technical Services	97
4. Goods	98

5. Services	98
6. Conclusion	99
D. Evidence of Disparities in Access to Business Capital	99
1. Federal Reserve Board Small Business Credit Surveys	100
a. 2021 Report on Firms Owned by People of Color	100
i. Overview	100
ii. Performance and Challenges	101
iii. Emergency Funding	101
iv. Debt and Financing	102
v. Findings for Non-employer Firms	103
b. 2021 Small Business Credit Survey	103
c. 2018 Small Business Credit Survey	104
i. Employer firms	104
ii. Non-employer firms	105
d. 2016 Small Business Credit Surveys	106
i. Demographics	106
ii. Profitability Performance Index	107
iii. Financial and Debt Challenges/Demands	107
iv. Business Location Impact	108
v. Non-employer Firms	108
2. The New York Federal Reserve Board’s 2016 Report on Woman-Owned Businesses	109
a. Firm Characteristics: Woman-Owned Firms Start Small and Remain Small and Concentrate in Less Capital-Intensive Industries	109
b. Profitability Challenges and Credit Risk Disparities	109
c. Financial Challenges During the Prior Twelve Months	109
d. Debt Differences	110
e. Demands for Financing	110
f. Firms That Did Not Apply for Financing	110
g. Lender Satisfaction	110
3. 2010 Minority Business Development Agency Report	111
4. Federal Reserve Board Surveys of Small Business Finances	112
5. 2020 Small Business Administration Loans to African American Businesses	112
6. Other Reports	114
E. Evidence of Disparities in Access to Human Capital	114
F. Conclusion	115

V. Qualitative Evidence of Race and Gender Barriers in Harris Health’s Market Area 117

A. Business Owner Interviews	118
B. Additional Anecdotal Data from Texas Disparity Studies	120
1. Discriminatory Attitudes and Negative Perceptions of Competency and Professionalism	120
2. Access to Formal and Informal Business and Professional Networks	123
3. Obtaining Work on an Equal Basis	126
C. Conclusion	131

VI. Recommendations for a Minority- and Woman-Owned Business Enterprise Program for Harris Health	133
A. Implement Race- and Gender-Neutral Measures	134
1. Implement an Electronic Contracting Data Collection, Monitoring and Notification System	134
2. Create a Senior Leadership Position to Oversee Business Diversity	135
3. Increase Vendor Outreach and Communication to M/WBEs and Small Firms	135
4. Consider Partnering with Other Agencies and Local Organizations to Provide Bonding, Financing and Technical Assistance Programs	136
B. Implement Race- and Gender-Conscious Measures	137
1. Adopt an Overall, Aspirational Goal for a New M/WBE Program	138
2. Use the Study as the Starting Point in Setting Narrowly Tailored Contract Goals	138
3. Adopt Narrowly Tailored Program Eligibility Standards	139
4. Implement Rigorous Compliance and Monitoring Policies and Procedures	139
5. Provide Training for all Harris Health Staff with Contracting Responsibilities or Vendor Interface	140
6. Provide Training for Vendors on the New Program	140
C. Develop Performance Standards	140
D. Establish a Program Sunset Date	141
Appendix A:	
Further Explanation of the Multiple Regression Analysis	143
Appendix B:	
Further Explanation of the Probit Regression Analysis	145
Appendix C:	
Significance Levels	147
Appendix D:	
Unweighted and Weighted Availability	149

List of Tables

Table 1-1: Final Contract Data File	3
Table 1-2: Final Contract Data File Net Dollar Value	4
Table 1-3: Industry Dollars Distribution of Harris Health’s Contracts by Percentage	4
Table 1-4: Summary of Distribution of Contract Dollars by Race and Gender	7
(share of total dollars)	
Table 1-5: Aggregated Unweighted M/WBE Availability	8
Table 1-6: Aggregated Weighted Availability	8
Table 1-7: Disparity Ratios by Demographic Group	9
Table 3-1: Final Contract Data File	49
Table 3-2: Final Contract Data File Net Dollar Value	49
Table 3-3: Industry Dollars Distribution of Harris Health Contracts by Percentage.	51
Table 3-4: County Distribution of Contract Dollars within the State of Texas	54
Table 3-5: NAICS Code Distribution of Contract Dollars in Harris Health’s Product Market when Constrained by its Geographic Market	55
Table 3-6: Distribution of Contract Dollars by Race and Gender (total dollars).	58
Table 3-7: Distribution of Contract Dollars by Race and Gender (share of total dollars)	61
Table 3-8: Unweighted M/WBE Availability for Harris Health Contracts	66
Table 3-9: Distribution of Harris Health Spending by NAICS Code (the Weights)	68
Table 3-10: Aggregated Weighted Availability for Harris Health Contracts	70
Table 3-11: Disparity Ratios by Demographic Group	72
Table 4-1: Business Formation Rates	79
All Industries, 2015 - 2019	
Table 4-2: Business Formation Probabilities Relative to White Males	79
All Industries, 2015 - 2019	
Table 4-3: Wage Differentials for Selected Groups Relative to White Men	80
All Industries, 2015 - 2019	
Table 4-4: Business Earnings Differentials for Selected Groups	80
Relative to White Men, All Industries	
Table 4-5: Business Formation Rates	81
Construction, 2015 - 2019	
Table 4-6: Business Formation Probability Differentials for Selected Groups	81
Relative to White Men, Construction, 2015 - 2019	
Table 4-7: Wage Differentials for Selected Groups Relative to White Men	82
Construction, 2015 - 2019	
Table 4-8: Business Earnings Differentials for Selected Groups Relative to White Men.	82
Construction, 2015 - 2019	
Table 4-9: Business Formation Rates	83
Construction-Related Services, 2015 - 2019	
Table 4-10: Business Formation Probability Differentials for Selected Groups	84
Relative to White Men, Construction-related Services, 2015 - 2019	

Table 4-11: Wage Differentials for Selected Groups Relative to White Men.	84
Construction-Related Services, 2015 - 2019	
Table 4-12: Business Earnings Differentials for Selected Groups Relative to White Men.	84
Construction-related Services, 2015 - 2019	
Table 4-13: Business Formation Rates.	85
Goods, 2015 - 2019	
Table 4-14: Business Formation Probabilities Relative to White Males	86
Goods, 2015 - 2019	
Table 4-15: Wage Differentials for Selected Groups Relative to White Men.	86
Goods, 2015 - 2019	
Table 4-16: Business Earnings Differentials for Selected Groups Relative to White Men.	86
Goods, 2015 - 2019	
Table 4-17: Business Formation Rates.	87
Services, 2015 - 2019	
Table 4-18: Business Formation Probability Differentials for Selected Groups	88
Relative to White Men, Services, 2015 - 2019	
Table 4-19: Table 4-19 Wage Differentials for Selected Groups Relative to White Men	88
Services, 2015 - 2019	
Table 4-20: Table 4-20 Business Earnings Differentials for Selected Groups.	89
Relative to White Men, Services, 2015 - 2019	
Table 4-21: Table 4-21 Business Formation Rates	89
Information Technology, 2015 - 2019	
Table 4-22: Business Formation Probability Differentials for Selected Groups	90
Relative to White Men, Information Technology, 2015 - 2019	
Table 4-23: Wage Differentials for Selected Groups Relative to White Men.	90
Information Technology, 2015 - 2019	
Table 4-24: Business Earnings Differentials for Selected Groups Relative to White Men.	91
Information Technology, 2015 - 2019	
Table 4-25: Two-Digit NAICS Code Definition of Sector	93
Table 4-26: Demographic Distribution of Sales and Payroll Data – Aggregated Groups.	95
All Industries, 2017	
Table 4-27: Disparity Ratios of Firm Utilization Measures	96
All Industries, 2017	
Table 4-28: Disparity Ratios – Aggregated Groups	96
Construction, 2017	
Table 4-29: Disparity Ratios – Aggregated Groups	97
Professional, Scientific and Technical Services, 2017	
Table 4-30: Disparity Ratios – Aggregated Groups	98
Goods, 2017	
Table 4-31: Disparity Ratios – Aggregated Groups	98
Services, 2017	
Table 6-32: Disparity Ratios by Demographic Group	137

I. EXECUTIVE SUMMARY

Colette Holt & Associates (“CHA”) was retained by Harris Health System (“Harris Health”) to perform a disparity study to gather the statistical and anecdotal data necessary to consider whether to adopt a race- and gender-conscious Minority-owned Business Enterprise (“MBE”) and Woman-owned Business Enterprise (“WBE,” collectively, “M/WBE”) program for locally funded contracts. We determined Harris Health’s utilization of M/WBEs during fiscal years 2018 through 2019; the availability of these firms as a percentage of all firms in Harris Health’s geographic and industry market areas; and any disparities between Harris Health’s utilization of M/WBEs and M/WBE availability. We further analyzed disparities in the Houston 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 Harris Health contracts and associated sub-contracts, as well as additional qualitative information from our many Texas studies. Based on these findings, we make the following recommendations for how Harris Health can ensure that all firms have full and fair opportunities to compete for its work.

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

A. Summary of Strict Constitutional Standards Applicable to Harris Health’s M/WBE Program

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. Harris Health must meet this test to ensure that any race- and gender-conscious program is in legal compliance.

As first adopted in the *Croson* decision, 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

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

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.

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

1. Statistical evidence of the underutilization of M/WBEs by the entity's and/or throughout the entity'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 entity. 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.

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".² 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 U.S. Department of Transportation's Disadvantaged Business Enterprise program³ or held that the results would be the same under strict scrutiny.

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 dis-

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

3. 49 C.F.R. Part 26.

crimination. 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 government’s program to determine whether it is sufficiently narrowly tailored.

B. Data Analyses of Harris Health’s Contracts

This Study examined contract data for 2018 through 2019 for Harris Health. In order to conduct the analysis, we constructed all the fields necessary for our analysis where they were missing in Harris Health’s contract records (*e.g.*, industry type; zip codes; six-digit North American Industry Classification System (“NAICS”) codes of prime contractors and subcontractors; M/WBE status). 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 ^a	98	27.7%
Subcontracts	256	72.3%
TOTAL	354	100.0%

a. A prime contract is one where the government directly contracts with a vendor. A subcontract is one where a firm contracts with a prime contractor to provide goods or services in connection with the prime vendor’s contract.

Source: CHA analysis of Harris Health data

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

Business Type	Total Contract Dollars	Share of Total Contract Dollars
Prime Contracts	\$57,286,632	74.7%
Subcontracts	\$19,406,875	25.3%
TOTAL	\$76,693,507	100.0%

Source: CHA analysis of Harris Health data

1. Utilization of M/WBEs on Harris Health's Contracts

Table 1-3 presents data on the 71 NAICS codes contained in the FCDF. These codes contain a total contract dollar value of \$76,693,507. 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 Harris Health's spending from the NAICS code, from the largest share of the NAICS codes to the smallest share.

Table 1-3: Industry Dollars Distribution of Harris Health's Contracts by Percentage

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
236220	Commercial and Institutional Building Construction	41.4%	41.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	11.6%	53.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	10.0%	63.0%
541110	Offices of Lawyers	4.5%	67.5%
524114	Direct Health and Medical Insurance Carriers	4.4%	72.0%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	2.7%	74.6%
238290	Other Building Equipment Contractors	2.6%	77.3%
561320	Temporary Help Services	2.4%	79.7%
541330	Engineering Services	1.5%	81.2%
541511	Custom Computer Programming Services	1.3%	82.5%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1.3%	83.7%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
621910	Ambulance Services	1.2%	85.0%
238310	Drywall and Insulation Contractors	1.1%	86.1%
561720	Janitorial Services	1.1%	87.1%
541690	Other Scientific and Technical Consulting Services	1.0%	88.1%
541512	Computer Systems Design Services	1.0%	89.1%
238350	Finish Carpentry Contractors	0.8%	89.9%
238330	Flooring Contractors	0.7%	90.7%
238320	Painting and Wall Covering Contractors	0.7%	91.4%
237310	Highway, Street, and Bridge Construction	0.5%	91.9%
238130	Framing Contractors	0.5%	92.4%
561312	Executive Search Services	0.5%	92.9%
339910	Jewelry and Silverware Manufacturing	0.4%	93.3%
541611	Administrative Management and General Management Consulting Services	0.4%	93.7%
238390	Other Building Finishing Contractors	0.4%	94.1%
221330	Steam and Air-Conditioning Supply	0.3%	94.4%
238910	Site Preparation Contractors	0.3%	94.7%
524298	All Other Insurance Related Activities	0.3%	95.0%
721110	Hotels (except Casino Hotels) and Motels	0.3%	95.4%
541612	Human Resources Consulting Services	0.3%	95.7%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.3%	96.0%
561730	Landscaping Services	0.3%	96.3%
445299	All Other Specialty Food Stores	0.3%	96.5%
238150	Glass and Glazing Contractors	0.2%	96.8%
561621	Security Systems Services (except Locksmiths)	0.2%	97.0%
238990	All Other Specialty Trade Contractors	0.2%	97.2%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.2%	97.5%
531210	Offices of Real Estate Agents and Brokers	0.2%	97.7%
237110	Water and Sewer Line and Related Structures Construction	0.2%	97.9%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
541430	Graphic Design Services	0.2%	98.1%
541613	Marketing Consulting Services	0.2%	98.2%
541930	Translation and Interpretation Services	0.2%	98.4%
621511	Medical Laboratories	0.2%	98.6%
621512	Diagnostic Imaging Centers	0.2%	98.8%
541820	Public Relations Agencies	0.1%	98.9%
561790	Other Services to Buildings and Dwellings	0.1%	99.0%
541370	Surveying and Mapping (except Geophysical) Services	0.1%	99.1%
423390	Other Construction Material Merchant Wholesalers	0.1%	99.2%
493190	Other Warehousing and Storage	0.1%	99.3%
492110	Couriers and Express Delivery Services	0.1%	99.4%
238120	Structural Steel and Precast Concrete Contractors	0.1%	99.5%
541810	Advertising Agencies	0.1%	99.5%
811212	Computer and Office Machine Repair and Maintenance	0.1%	99.6%
423840	Industrial Supplies Merchant Wholesalers	0.1%	99.7%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.1%	99.7%
238140	Masonry Contractors	0.04%	99.7%
238160	Roofing Contractors	0.04%	99.8%
238110	Poured Concrete Foundation and Structure Contractors	0.03%	99.8%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.03%	99.9%
525110	Pension Funds	0.03%	99.9%
541420	Industrial Design Services	0.03%	99.9%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.03%	99.9%
541380	Testing Laboratories	0.02%	100.0%
238340	Tile and Terrazzo Contractors	0.01%	100.0%
424490	Other Grocery and Related Products Merchant Wholesalers	0.01%	100.0%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
423220	Home Furnishing Merchant Wholesalers	0.01%	100.0%
518210	Data Processing, Hosting, and Related Services	0.01%	100.0%
442291	Window Treatment Stores	0.004%	100.0%
423440	Other Commercial Equipment Merchant Wholesalers	0.002%	100.0%
512240	Sound Recording Studios	0.002%	100.0%
561410	Document Preparation Services	0.0004%	100.0%
TOTAL		100.0%	

Source: CHA analysis of Harris 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.⁴ 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 90.4% of all dollars during the Study period. The four counties within the Houston metropolitan area – Harris, Galveston, Montgomery, and Fort Bend – captured 96.1% of the state dollars and 86.8% of the entire FCDF. Therefore, these four counties were determined to be the geographic market for Harris Health, and we limited our analysis to firms in these counties.

The next step was to determine the dollar value of Harris Health’s utilization of M/WBEs as measured by payments to prime firms and subcontractors and disaggregated by race and gender.⁵

Table 1-4 presents the distribution of contract dollars for fiscal years 2018 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	0.0%	2.3%	0.3%	0.0%	2.6%	5.3%	7.9%	92.1%	100.0%

Source: CHA analysis of Harris Health data

4. National Academies of Sciences, Engineering, and Medicine 2010, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346> (“National Disparity Study Guidelines”), at p. 29.
5. 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.

2. Availability of M/WBEs to Perform on Harris Health's Contracts

Using the modified "custom census" approach to estimating availability and the further assignment of race and gender using the FCDF, the Master M/WBE Directory and other sources, we determined the unweighted availability of M/WBEs in Harris Health's market area. Table 1-5 presents these results. For further explanation of the role of unweighted and weighted availability and how these are calculated, please see Chapter III and Appendix D.⁶

Table 1-5: Aggregated Unweighted M/WBE Availability

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
2.8%	2.1%	1.1%	0.1%	6.1%	4.7%	10.8%	89.2%	100.0%

Source: CHA analysis of Harris Health data

We next determined the aggregated availability of M/WBEs, weighted by Harris 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 Harris Health to determine an overall, aspirational goal.

Table 1-6: Aggregated Weighted Availability

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
6.8%	4.7%	2.4%	0.3%	14.3%	5.2%	19.5%	80.5%	100.0%

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

3. Disparity Analyses of Harris Health's Contracts

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.

6. 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>.

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 the 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.⁷ Second, a 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.⁸ A more in-depth discussion of statistical significance is provided in Chapter III and Appendix C. Table 1-7 presents the calculated disparity ratios for each demographic group. The disparity ratios for Blacks, Hispanics, Asians, Native Americans, MBEs as a group and M/WBEs as a whole are substantively significant. The disparity ratio for M/WBEs is statistically significant at the 0.01 level and for non-M/WBEs at the 0.001 level.

Table 1-7: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE
Disparity Ratio	0.0% [‡]	48.5% [‡]	12.2% [‡]	0.0% [‡]	18.2% [‡]	101.2%	40.4% ^{**‡}	114.5% ^{***}

Source: CHA analysis of Harris Health data

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

‡ Indicates substantive significance

Overall, based on the statistical significance of the MBE and M/WBE results and the substantive significance of the Blacks, Hispanics, Asians, Native Americans, MBEs, and M/WBE results, we find the data as a whole support the conclusion that M/WBE firms have not reached parity in all aspects of Harris Health’s contracting activities compared to non-M/WBE firms.

C. Analysis of Disparities in the Houston 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 Harris Health

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7. 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.”).
 8. 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.

failing to implement a race- and gender-conscious program, because contracting diversity programs are rarely imposed outside of specific government agencies. To examine the outcomes throughout the Houston area economy, we explored two Census Bureau datasets and the government and academic literature relevant to how discrimination in the Houston market and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in Harris Health's prime contract and subcontract opportunities.

We analyzed the following data and literature:

- The U.S. Bureau of the Census' American Community Survey for the Houston-The Woodlands-Sugarland Metropolitan Statistical Area from 2015 through 2019⁹. This rich data set establishes with greater certainty any causal links between race, gender and economic outcomes. We employed a multiple regression statistical technique to examine the rates at which minorities and women form firms. In general, we 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 from 2017. This dataset indicated large disparities between M/WBE firms and non-M/WBE firms when examining the sales of all firms, the sales of employer firms (firms that employ at least one worker), and the payroll of employer firms.
- Surveys and literature on barriers to access to commercial credit and the development of human capital further reports that minorities continue to face constraints on their entrepreneurial success based on race. These constraints negatively impact the ability of firms to form, to grow, and to succeed. These results support the conclusions drawn from the anecdotal interviews and analysis of Harris 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 Harris Health should continue to use race-conscious contract goals to ensure a level playing field for all firms.

9. This is the formal name for the nine-county MSA. The counties include: Austin; Brazoria; Chambers; Fort Bend; Galveston; Harris; Liberty; Montgomery; and Waller.

D. Qualitative Evidence of Race and Gender Barriers in Harris 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 Harris Health's prime contracts. To explore this type of anecdotal evidence, we received input from 11 participants in small group business owner interviews.

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

- Several minority or female owners reported they face biased and negative assumptions about their qualifications and capabilities.
- Obtaining information about solicitations was reported by some interviewees to be difficult.
- More outreach and access to information and decision makers were recommendations to increase opportunities for M/WBEs.
- Some M/WBEs felt that assertions about the importance of inclusion were not followed by concrete actions.

Additional anecdotal information presented in Chapter V from the recent disparity studies conducted by Colette Holt & Associates for various Texas governments further illustrates the difficulties faced by M/WBEs in obtaining public and private sector contracts. Although not dispositive, these reports corroborate the statistical findings regarding barriers faced by minorities and women in the Houston area and the overall Texas marketplace.

E. Recommendations for Ensuring Equity in Harris Health's Contracting Activities

The quantitative and qualitative evidence reported in this Study present a thorough examination of whether minorities and women doing business in Harris Health's market have full and fair opportunities to compete for its prime contracts and associated subcontracts. The findings support the conclusion that M/WBEs continue to suffer discriminatory barriers and that Harris Health has a strong basis in evidence upon which to implement a race- and gender-conscious contracting program.

As a general matter, Harris Health should model its program on the recently adopted program for Harris County. This new County Program contains all the elements necessary to meet strict constitutional scrutiny and embodies best practices for narrowly tailored M/WBE programs, including eligibility standards; contract specific goal setting procedures; flexible standards for review of bids and proposals; counting rules for contract goal credit; contract performance monitoring standards and processes; prompt payment enforcement mechanisms; contract close out procedures; sanctions policies; vendor outreach; and an electronic contracting monitoring system.

Given the need for extensive resources to administer a legally compliant and well-run program, we urge Harris Health to enter into an Interlocal Agreement (“ILA”) with Harris County for the administration of several elements of Harris Health’s new program. Efficiencies that can be obtained using this approach are noted in our recommendations.

Based on the results of this Study, federal case law and national best practices for M/WBE programs, we recommend the following elements of a narrowly tailored M/WBE program.

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 a program, so that the burden on non-M/WBEs is no more than necessary to achieve the government’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, based on the business owner interviews, input of Harris Health staff, and national best practices for business development programs.

a. 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 Harris Health should take to implement a Program. A centralized system must 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 Harris Health staff, prime contractors and subcontractors to perform all necessary activities.

This is one element that can be outsourced to Harris County.

b. Create a Senior Leadership Position to Oversee Business Diversity

Harris Health should create a new senior leadership position to oversee all efforts towards contracting diversity and inclusion. This new position should report directly to a member of the Harris Health System Executive Leadership team. This reporting structure will signal the importance of this function and provide it with the bureaucratic stature necessary to move new initiatives forward. This position should work very closely with Harris Health System Chief DE&I and all departments with contract related functions as well as Harris County Purchasing assigned to Harris Health. This position should also directly coordinate and interface with the Harris County Department of Economic Equity and Opportunity.

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

Harris Health should conduct vendor outreach and “matchmaking” events for its larger or highly specialized projects. Targeted email blasts about upcoming opportunities would also be helpful. Harris Health’s contracting opportunities should also be included in events and activities conducted by Harris County, under the ILA.

We further suggest publishing an annual contracting forecast of larger contracts that will assist vendors to plan their work and form teams. This is especially helpful for small firms with limited marketing resources. Provid-

ing information about upcoming bid opportunities is one race- and gender-neutral measure that will assist all firms to access information.

Another enhancement requested in the business owner interviews is training in how to do business with Harris Health. In addition to developing written materials for its website, Harris Health should hold sessions and create training videos that provide information on all aspects of its contracting program.

d. 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.

An important difference between the County's program and a program for Harris Health is that health systems contract with Group Purchasing Organizations ("GPOs"). Harris Health does not directly contract and manage purchases through its GPO, and therefore cannot set contract goals or insist that firms be certified as M/WBEs by the agencies it recognizes. However, GPOs have in recent years recognized the value of supplier diversity and are taking steps to be more inclusive in their contracting activities.

Given this structure, Harris Health should provide technical assistance to M/WBEs that seek to do business with GPOs. Sessions or training videos that explain the GPO structure, how to contact its buyers and approaches to successful bid submissions would be useful for firms seeking more opportunities with health care organizations.

2. Implement Race- and Gender-Conscious Measures

The quantitative and anecdotal Study results overwhelming present the "strong basis in evidence" that the courts require to support race- and gender-conscious relief. Without targeted efforts to reduce discriminatory barriers, minorities and women will likely continue to face diminished opportunities because of the race or gender of the firm's owner(s). We therefore recommend the adoption of a new Program with the following major elements.

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

Harris Health should set an annual, overall target for M/WBE utilization on its non-GPO 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 Harris Health funds. We found the weighted availability of M/WBEs to be 19.5%, which would support an overall goal of 20% 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, Harris 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, Harris 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 will include a goal setting module that Harris Health should use as its data source.

Contract goal setting could be a function conducted by Harris County.

c. Adopt Narrowly Tailored Program Eligibility Standards

Program eligibility should be limited to firms that have a business presence in the Houston market area, as established by this Study, or that can demonstrate that they have done business within that market area.

Harris 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 Houston. These are the certifications accepted by Harris County. However, it will be Harris Health's constitutional responsibility, to ensure that the certifications it accepts are from narrowly tailored programs with demonstrated integrity.

d. Implement Rigorous Compliance and Monitoring Policies and Procedures

To ensure that the new M/WBE program sets narrowly tailored goals and eligibility requirements, Harris 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 must be clearly spelled out. Further, 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 subcontractors at all tiers of performance and monitoring prompt payment obligations of prime contractors to subcontractors. Harris 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.

Contract compliance and monitoring are functions that could be outsourced through the ILA.

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

These significant changes will require an entity-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 an opportunity to reaffirm Harris 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 Harris Health to provide some formal training on these proposed new program elements to vendors and Harris Health 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 pro-

grams, accessing local Procurement Technical Assistance Centers, and other support.

3. Develop Performance Standards

Harris 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.

4. Establish a Program Sunset Date

Harris 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, approximately every five to six years.

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 Harris Health System (“Harris Health”), must meet the judicial test of constitutional “strict scrutiny”.¹⁰ Strict scrutiny constitutes the highest level of judicial review.¹¹ 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.¹²

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.¹³ Anecdotal data can consist of

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

11. 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).

12. *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;¹⁴
2. The efficacy of race-neutral remedies at overcoming identified discrimination;¹⁵
3. The flexibility and duration of the relief, including the availability of waiver provisions;¹⁶
4. The relationship of numerical goals to the relevant labor market;¹⁷ and
5. The impact of the relief on the rights of third parties.¹⁸

In *Adarand v. Peña*,¹⁹ 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.^{20,21}

Most federal courts, including the Fifth Circuit,²² have subjected preferences for Woman-Owned Business Enterprises (“WBEs”) to “intermediate scrutiny”.²³ Gen-

13. *Id.* at 509.

14. *Id.* at 507.

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

16. *Id.*

17. *Id.*

18. *Crosen*, 488 U.S. at 506.

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

20. *See, for example, Crosen*, 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).

21. 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).

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

23. *See, e.g., Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore and Maryland Minority Contractors Association*, 83 F. Supp. 2d 613, 620 (D. Md. 2000), (“*Baltimore I*”); *W.H. Scott Construction*, 199 F.3d at 206, 215; *Engineering Contractors Association 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 Association 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”.²⁴ 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 program²⁵ or have held that the results would be the same under strict scrutiny.²⁶

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.^{27,28} 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.²⁹ 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.³⁰ 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.³¹

Unlike most legal challenges, the defendant bears the initial burden of producing “strong evidence” in support of its race-conscious program.³² As held by the Fifth Circuit,³³ 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.³⁴ “[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.”³⁵

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

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

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

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

28. 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.

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

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

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

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

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

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

35. *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.”³⁶ 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.³⁷ 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.”³⁸ When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.³⁹ 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.⁴⁰

To meet strict scrutiny, studies such as those listed in the recent U.S. Department of Justice Report⁴¹ 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 government’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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36. *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”).
 37. *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), *aff’d* 840 F.3d 932 (7th Cir. 2016) (“Midwest Fence II”).
 38. *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d. 964, 970 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).
 39. *Coral Construction*, 941 F. 2d at 921; *Engineering Contractors II*, 122 F.3d at 916.
 40. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1166 (10th Cir. 2000), *cert. granted*, 532 U.S. 941, 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).
 41. 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,⁴² 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”⁴³ 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”).⁴⁴ 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:

42. U.S. Const. Amend. XIV, §1.

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

44. 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.⁴⁵

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.⁴⁶ 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.⁴⁷ 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.

45. 488 U.S. at 491-92.

46. 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.”).

47. 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.”⁴⁸

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.”⁴⁹

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.⁵⁰ 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.”⁵¹

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

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

49. *Id.*

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

51. *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.⁵²

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.⁵³ 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.⁵⁴

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*.⁵⁵

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

53. *Id.* at 502.

54. *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 Harris Health Program for Minority- and Woman-Owned Businesses

The case law on the U.S. Department of Transportation's DBE program should guide Harris Health's program for locally funded contracts. 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 regulations⁵⁶ have been upheld by every court⁵⁷, and local programs for Minority- and Woman-Owned Business Enterprises will be judged against the following legal framework.⁵⁸

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;

55. *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").

56. 49 C.F.R. Part 26.

57. 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).

58. *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.⁵⁹

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."⁶⁰

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 a government'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/WBEs⁶¹ and the disparate treatment of such firms by actors critical to their suc-

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

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

cess will meet strict scrutiny. Discrimination must be shown using statistics and economic models to examine the effects of systems or markets on different groups, as well as by evidence of personal experiences with discriminatory conduct, policies or systems.⁶² 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.⁶³ 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.⁶⁴

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.”⁶⁵

Harris 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.”⁶⁶ 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

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

62. *Adarand VII*, 228 F.3d at 1166 (“statistical and anecdotal evidence are appropriate”).

63. *Id.*

64. *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.

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

66. *Id.* at 977.

formation rates and business earnings of minorities and women compared to similarly situated non-minority males.⁶⁷

1. Define Harris Health's Market Area

The first step is to determine the market area in which Harris 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.⁶⁸ Harris 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.⁶⁹ This study employs long established economic principles to empirically establish Harris 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.⁷⁰ 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.⁷¹ This produces the utilization results within the geographic market area.⁷²

2. Determine Harris Health's Utilization of Minority- and Woman-Owned Businesses

The study should next determine Harris 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 and high dollar

67. 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.

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

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

70. National Academies of Sciences, Engineering, and Medicine 2010, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346>. ("National Disparity Study Guidelines").

71. *Id.*

72. For this Report, we found Harris Health's market area to be Harris, Galveston, Montgomery, and Fort Bend counties. Please see Chapter III.

contracts that are not required to go through a formal bid process per state law, since it is unlikely that it is realistic or useful to set goals on low dollar contracts. Developing the file for analysis involves the following steps:

1. *Develop the Initial Contract Data File.* This involves first gathering Harris 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 entity's) 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 entity'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 Harris Health's contracting and procurement activities.
4. *Determining the Geographic Market.* The federal courts require that a government narrowly tailor its race- and gender-conscious contracting program elements to its geographic market area.⁷³ This element of the analysis must be empirically established⁷⁴ and the accepted approach is to analyze those detailed industries, as defined by 6-digit NAICS codes,

73. *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.").

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

that make up at least 75% of the prime contract and subcontract payments for the study period.⁷⁵

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

Next, the study must estimate the availability of minorities and women in Harris Health's market area to participate in Harris 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 Harris 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 Harris Health. This methodology includes both certified firms and non-certified firms owned by minorities or women.⁷⁶ The Master Directory consists of all available government and private D/M/WBE directories, limited to firms within Harris Health's geographic and product market.
 - The firms contained in Harris 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 classified.⁷⁷ This will produce estimates of minority and woman business

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

76. *Id.* at 33-34.

availability in Harris 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 Harris Health’s spending in each NAICS code. The unweighted availability determination will be weighted by the share of dollars Harris 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 Harris 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 Harris Health’s overall usage of available firms must be conducted with an understanding of what NAICS codes received what share of the entity’s 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*,⁷⁸ 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).
- 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

77. 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.

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

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.⁷⁹ 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.⁸⁰
- 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 program⁸¹ and the more recent successful defense of the Illinois State Toll Highway's DBE program.⁸²

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

79. 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.

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

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

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

Many plaintiffs have tried to argue that studies must somehow control for “capacity” of M/WBEs to perform specific government 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 government 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 defendant. 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.”⁸³

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.⁸⁴ Significantly, *Croson* does not “require disparity studies that measure whether construction firms are able to perform a *particular contract*.”⁸⁵

There are also practical reasons not to circumscribe availability through “capacity” limitations. First, there is no agreement concerning what variables are relevant or how those variables are to be measured for the purpose of examining whether race and gender barriers impede the success of minority

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

84. 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).

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

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 a government (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 Harris 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 the entity's 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.⁸⁶

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.⁸⁷ 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.⁸⁸ 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.⁸⁹ 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.⁹⁰

Harris Health need not prove that the statistical inferences of discrimination are “correct”. In upholding Denver’s M/WBE Program, the Tenth Circuit noted

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

87. *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).

88. 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.

89. 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.

90. *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”).

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.⁹¹

Nor must Harris 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.⁹²

Harris 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.⁹³

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.⁹⁴

5. Analyze Economy-Wide Evidence of Race- and Gender-Based Disparities in Harris 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 similar non-M/WBEs, their earnings from such businesses, and their access to capital markets are highly relevant to the determination of whether the mar-

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

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

93. *Id.* at 971.

94. *Id.* at 973.

ket 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.⁹⁵ 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.⁹⁶

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."⁹⁷ 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 because they cannot control for subjective descriptions such as "quality of education", "culture" and "religion".⁹⁸

95. *Builders Association of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725, 740 (N.D. Ill. 2003).

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

97. *Id.*

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

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.⁹⁹ 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.¹⁰⁰

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

6. Evaluate Anecdotal Evidence of Race- and Gender-Based Barriers to Equal Opportunities in Harris 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.”¹⁰¹ 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

99. *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*”).

100. *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.”).

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

their success on governmental projects.¹⁰² 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.”¹⁰³ “[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.”¹⁰⁴

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.”¹⁰⁵ 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.”¹⁰⁶

D. Narrowly Tailoring an M/WBE Program for Harris Health

Even if Harris 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 Program¹⁰⁷ have been upheld using that framework.¹⁰⁸ The courts have repeatedly examined the following factors in

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

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

104. *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.

105. *Id.* at 1579-1580.

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

107. 49 C.F.R. Part 26.

determining whether race-based remedies are narrowly tailored to achieve their purpose:

- The necessity of relief;¹⁰⁹
- The efficacy of race- and gender-neutral remedies at overcoming identified discrimination;¹¹⁰
- The relationship of numerical benchmarks for government spending to the availability of minority- and woman-owned firms and to subcontracting goal setting procedures;¹¹¹
- The flexibility of the program requirements, including the provision for good faith efforts to meet goals and contract specific goal setting procedures;¹¹²
- The relationship of numerical goals to the relevant market;¹¹³
- The impact of the relief on third parties;¹¹⁴ and
- The overinclusiveness of racial classifications.¹¹⁵

1. Consider Race- and Gender-Neutral Remedies

Race- and gender-neutral approaches are necessary components of a defensible and effective M/WBE program¹¹⁶. The failure to seriously consider such remedies has proven fatal to several programs.¹¹⁷ 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 Harris Health without resorting to

108. 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).

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

110. *Paradise*, 488 U.S. at 171.

111. *Id.*

112. *Id.*

113. *Id.*

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

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

116. *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).

117. 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.¹¹⁸ Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.¹¹⁹

The requirement that the government 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.¹²⁰ 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.¹²¹ 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.”¹²²

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.¹²³ 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.¹²⁴ “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*.”¹²⁵

118. See 49 C.F.R. §26.51.0.

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

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

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

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

123. *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.

124. 49 C.F.R. §26.45 (b).

125. *Id.*

Goals can be set at various levels of particularity and participation. Harris 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,¹²⁶ to separate goals for each minority group and women.¹²⁷

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.”¹²⁸ However, sheer speculation cannot form the basis for an enforceable measure.¹²⁹

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,¹³⁰ 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.¹³¹ 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.¹³² In *Croson*, the Court refers approvingly to the contract-by-contract waivers used in the USDOT’s DBE program.¹³³ This feature has been central to the holding that the

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

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

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

129. *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).

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

131. 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”).

132. 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.¹³⁴ 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 Harris 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.¹³⁵ 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”.¹³⁶ 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.”¹³⁷ 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.¹³⁸ 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.¹³⁹

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.¹⁴⁰ “[W]ealthy minority owners and wealthy minority-owned

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

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

135. *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).

136. *Webster*, 51 F.Supp.2d at 1380–1381.

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

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

139. *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.”¹⁴¹ Further, anyone must be able to challenge the disadvantaged status of any firm.¹⁴² 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.¹⁴³ However, “innocent” parties can be made to share some of the burden of the remedy for eradicating racial discrimination.¹⁴⁴ 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.¹⁴⁵

Burdens must be proven and cannot constitute mere speculation by a plaintiff.¹⁴⁶ “Implementation of the race-conscious contracting goals for which [the

140. *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).

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

142. 49 C.F.R. §26.87.

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

144. *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.”).

145. *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.”¹⁴⁷

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,¹⁴⁸ and the regulations do not limit the application of the program to only subcontracts.¹⁴⁹ 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.¹⁵⁰

146. *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).

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

148. 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.”).

149. 49 C.F.R. §26.45(a)(1).

150. *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.”¹⁵¹ 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 2004.¹⁵² How old is too old is not definitively answered,¹⁵³ 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.^{154, 155} 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.”¹⁵⁶

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

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

153. *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.”).

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

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

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

III. CONTRACT DATA ANALYSIS FOR HARRIS HEALTH SYSTEMS

A. Contract Data Overview

We analyzed contract data for 2018 through 2019 for Harris Health System (“Harris Health”). In order to conduct the analysis, we constructed all the fields necessary for our analysis where they were missing in the entity’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	98	27.7%
Subcontracts	256	72.3%
TOTAL	354	100.0%

Source: CHA analysis of Harris Health data

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

Business Type	Total Contract Dollars	Share of Total Contract Dollars
Prime Contracts	\$57,286,632	74.7%
Subcontracts	\$19,406,874	25.3%
TOTAL	\$76,693,507	100.0%

Source: CHA analysis of Harris Health data

Sections B through F present our analysis of Harris Health’s contracts. First, we determined the geographic and product markets for the analysis. Next, we estimated the utilization of M/WBEs by Harris Health. Third, we used the FCDF, in combination with other databases (as described below), to calculate M/WBE

unweighted and weighted availability in Harris Health’s marketplace. Finally, we analyzed whether there are any disparities between Harris Health’s utilization of M/WBEs and M/WBE weighted availability.

B. Harris Health’s Geographic and Product Market

As discussed in Chapter II, the federal courts¹⁵⁷ require that a government narrowly tailor its race- and gender-conscious contracting program elements to its geographic market area. This element of the analysis must be empirically established.¹⁵⁸ The accepted approach is to analyze those detailed industries, as defined by six-digit NAICS codes,¹⁵⁹ that make up at least 75% of the prime contract and subcontract payments for the study period.¹⁶⁰ The determination of Harris Health’s geographic and product market requires three steps:

1. Describing 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 Harris 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. Harris Health’s Final Contract Data File

The FCDF, which establishes Harris Health’s product market, consists of 71 NAICS codes with a total contract dollar value of \$76,693,508. 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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157. *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.”).
158. *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”).
159. www.census.gov/eos/www/naics.
160. National Academies of Sciences, Engineering, and Medicine 2010, *Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/14346> (“National Disparity Study Guidelines”).

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

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
236220	Commercial and Institutional Building Construction	41.4%	41.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	11.6%	53.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	10.0%	63.0%
541110	Offices of Lawyers	4.5%	67.5%
524114	Direct Health and Medical Insurance Carriers	4.4%	72.0%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	2.7%	74.6%
238290	Other Building Equipment Contractors	2.6%	77.3%
561320	Temporary Help Services	2.4%	79.7%
541330	Engineering Services	1.5%	81.2%
541511	Custom Computer Programming Services	1.3%	82.5%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1.3%	83.7%
621910	Ambulance Services	1.2%	85.0%
238310	Drywall and Insulation Contractors	1.1%	86.1%
561720	Janitorial Services	1.1%	87.1%
541690	Other Scientific and Technical Consulting Services	1.0%	88.1%
541512	Computer Systems Design Services	1.0%	89.1%
238350	Finish Carpentry Contractors	0.8%	89.9%
238330	Flooring Contractors	0.7%	90.7%
238320	Painting and Wall Covering Contractors	0.7%	91.4%
237310	Highway, Street, and Bridge Construction	0.5%	91.9%
238130	Framing Contractors	0.5%	92.4%
561312	Executive Search Services	0.5%	92.9%
339910	Jewelry and Silverware Manufacturing	0.4%	93.3%
541611	Administrative Management and General Management Consulting Services	0.4%	93.7%
238390	Other Building Finishing Contractors	0.4%	94.1%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
221330	Steam and Air-Conditioning Supply	0.3%	94.4%
238910	Site Preparation Contractors	0.3%	94.7%
524298	All Other Insurance Related Activities	0.3%	95.0%
721110	Hotels (except Casino Hotels) and Motels	0.3%	95.4%
541612	Human Resources Consulting Services	0.3%	95.7%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.3%	96.0%
561730	Landscaping Services	0.3%	96.3%
445299	All Other Specialty Food Stores	0.3%	96.5%
238150	Glass and Glazing Contractors	0.2%	96.8%
561621	Security Systems Services (except Locksmiths)	0.2%	97.0%
238990	All Other Specialty Trade Contractors	0.2%	97.2%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.2%	97.5%
531210	Offices of Real Estate Agents and Brokers	0.2%	97.7%
237110	Water and Sewer Line and Related Structures Construction	0.2%	97.9%
541430	Graphic Design Services	0.2%	98.1%
541613	Marketing Consulting Services	0.2%	98.2%
541930	Translation and Interpretation Services	0.2%	98.4%
621511	Medical Laboratories	0.2%	98.6%
621512	Diagnostic Imaging Centers	0.2%	98.8%
541820	Public Relations Agencies	0.1%	98.9%
561790	Other Services to Buildings and Dwellings	0.1%	99.0%
541370	Surveying and Mapping (except Geophysical) Services	0.1%	99.1%
423390	Other Construction Material Merchant Wholesalers	0.1%	99.2%
493190	Other Warehousing and Storage	0.1%	99.3%
492110	Couriers and Express Delivery Services	0.1%	99.4%
238120	Structural Steel and Precast Concrete Contractors	0.1%	99.5%
541810	Advertising Agencies	0.1%	99.5%
811212	Computer and Office Machine Repair and Maintenance	0.1%	99.6%
423840	Industrial Supplies Merchant Wholesalers	0.1%	99.7%

NAICS	NAICS Code Description	Pct Contract Dollars	Cumulative Pct Contract Dollars
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.1%	99.7%
238140	Masonry Contractors	0.04%	99.7%
238160	Roofing Contractors	0.04%	99.8%
238110	Poured Concrete Foundation and Structure Contractors	0.03%	99.8%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.03%	99.9%
525110	Pension Funds	0.03%	99.9%
541420	Industrial Design Services	0.03%	99.9%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.03%	99.9%
541380	Testing Laboratories	0.02%	100.0%
238340	Tile and Terrazzo Contractors	0.01%	100.0%
424490	Other Grocery and Related Products Merchant Wholesalers	0.01%	100.0%
423220	Home Furnishing Merchant Wholesalers	0.01%	100.0%
518210	Data Processing, Hosting, and Related Services	0.01%	100.0%
442291	Window Treatment Stores	0.004%	100.0%
423440	Other Commercial Equipment Merchant Wholesalers	0.002%	100.0%
512240	Sound Recording Studios	0.002%	100.0%
561410	Document Preparation Services	0.0004%	100.0%
TOTAL		100.0%	

Source: CHA analysis of Harris Health data

2. Harris 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 90.4% of all dollars during the study period. The four counties within the Houston metropolitan area – Harris, Galveston, Montgomery, and Fort Bend – captured 96.1% of the state dollars and 86.8% of the entire FCDF. Therefore, these four counties were determined to be the geographic market for Harris 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
Harris County	83.6%
Galveston County	5.1%
Montgomery County	4.0%
Fort Bend County	3.3%
Dallas County	2.2%
Williamson County	0.8%
Brazos County	0.3%
Tarrant County	0.2%
Travis County	0.1%
El Paso County	0.1%
Liberty County	0.1%
Bastrop County	0.1%
Brazoria County	0.02%
Potter County	0.003%
TOTAL	100.0%

Source: CHA analysis of Harris Health data

C. Harris Health’s Utilization of M/WBEs in its Geographic Market

Having determined Harris Health’s geographic market area, the next step was to determine the dollar value of Harris Health’s utilization of M/WBEs¹⁶¹ as measured by net payments to prime firms and subcontractors and disaggregated by race and gender. There were 62 NAICS codes after constraining the FCDF by the geographic market; the dollar value of the contracts in these codes was \$66,597,239. 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.

161. 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.”).

These data were used to calculate weighted availability¹⁶² from unweighted availability, as discussed below.

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

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
236220	Commercial and Institutional Building Construction	\$31,559,902	47.4%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$7,970,827	12.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$7,605,326	11.4%
524114	Direct Health and Medical Insurance Carriers	\$3,200,000	4.8%
238290	Other Building Equipment Contractors	\$1,921,384	2.9%
561320	Temporary Help Services	\$1,529,377	2.3%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	\$964,890	1.4%
541330	Engineering Services	\$963,418	1.4%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$945,523	1.4%
621910	Ambulance Services	\$929,320	1.4%
561720	Janitorial Services	\$822,901	1.2%
541512	Computer Systems Design Services	\$738,587	1.1%
238310	Drywall and Insulation Contractors	\$723,333	1.1%
238350	Finish Carpentry Contractors	\$579,551	0.9%
238330	Flooring Contractors	\$570,062	0.9%
238320	Painting and Wall Covering Contractors	\$550,429	0.8%
237310	Highway, Street, and Bridge Construction	\$399,590	0.6%
238130	Framing Contractors	\$371,215	0.6%
541110	Offices of Lawyers	\$260,000	0.4%

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

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
221330	Steam and Air-Conditioning Supply	\$258,470	0.4%
238910	Site Preparation Contractors	\$258,134	0.4%
721110	Hotels (except Casino Hotels) and Motels	\$242,961	0.4%
541612	Human Resources Consulting Services	\$235,000	0.4%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	\$226,659	0.3%
561730	Landscaping Services	\$221,003	0.3%
445299	All Other Specialty Food Stores	\$220,000	0.3%
238390	Other Building Finishing Contractors	\$217,784	0.3%
238150	Glass and Glazing Contractors	\$182,714	0.3%
561621	Security Systems Services (except Locksmiths)	\$177,022	0.3%
238990	All Other Specialty Trade Contractors	\$175,155	0.3%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$172,864	0.3%
531210	Offices of Real Estate Agents and Brokers	\$170,297	0.3%
541613	Marketing Consulting Services	\$136,437	0.2%
541930	Translation and Interpretation Services	\$133,996	0.2%
541690	Other Scientific and Technical Consulting Services	\$129,508	0.2%
561790	Other Services to Buildings and Dwellings	\$99,950	0.2%
237110	Water and Sewer Line and Related Structures Construction	\$92,473	0.1%
541370	Surveying and Mapping (except Geophysical) Services	\$84,674	0.1%
423390	Other Construction Material Merchant Wholesalers	\$70,227	0.1%
493190	Other Warehousing and Storage	\$66,886	0.1%
492110	Couriers and Express Delivery Services	\$62,145	0.1%
238120	Structural Steel and Precast Concrete Contractors	\$56,064	0.1%
541810	Advertising Agencies	\$50,000	0.1%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	\$39,866	0.1%
541430	Graphic Design Services	\$30,825	0.05%
238160	Roofing Contractors	\$28,735	0.04%
238110	Poured Concrete Foundation and Structure Contractors	\$26,151	0.04%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$24,882	0.04%
541511	Custom Computer Programming Services	\$21,559	0.03%
541420	Industrial Design Services	\$20,007	0.03%
238140	Masonry Contractors	\$19,762	0.03%
238340	Tile and Terrazzo Contractors	\$10,149	0.02%
541611	Administrative Management and General Management Consulting Services	\$8,200	0.01%
423220	Home Furnishing Merchant Wholesalers	\$5,775	0.01%
541380	Testing Laboratories	\$4,300	0.01%
518210	Data Processing, Hosting, and Related Services	\$3,993	0.01%
442291	Window Treatment Stores	\$2,764	0.004%
423440	Other Commercial Equipment Merchant Wholesalers	\$1,698	0.003%
512240	Sound Recording Studios	\$1,513	0.002%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$475	0.001%
621511	Medical Laboratories	\$390	0.001%
561410	Document Preparation Services	\$140	0.0002%
TOTAL		\$66,597,239	100.0%

Source: CHA analysis of Harris Health data

D. Harris Health's Utilization of M/WBEs in its 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
221330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$258,470	\$258,470
236220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,559,902	\$31,559,902
237110	\$0	\$0	\$0	\$0	\$0	\$87,755	\$87,755	\$4,718	\$92,473
237310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$399,590	\$399,590
238110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,151	\$26,151
238120	\$0	\$0	\$0	\$0	\$0	\$10,769	\$10,769	\$45,295	\$56,064
238130	\$0	\$0	\$0	\$0	\$0	\$1,560	\$1,560	\$369,655	\$371,215
238140	\$0	\$0	\$0	\$0	\$0	\$2,699	\$2,699	\$17,063	\$19,762
238150	\$0	\$58,235	\$0	\$0	\$58,235	\$21,098	\$79,333	\$103,381	\$182,714
238160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,735	\$28,735
238210	\$0	\$69,386	\$0	\$0	\$69,386	\$102,596	\$171,982	\$7,798,844	\$7,970,827
238220	\$0	\$0	\$0	\$0	\$0	\$50,415	\$50,415	\$7,554,910	\$7,605,325
238290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,921,384	\$1,921,384
238310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$723,333	\$723,333
238320	\$0	\$0	\$0	\$0	\$0	\$222,423	\$222,423	\$328,007	\$550,429
238330	\$0	\$360	\$0	\$0	\$360	\$115,054	\$115,414	\$454,648	\$570,062
238340	\$0	\$3,750	\$0	\$0	\$3,750	\$0	\$3,750	\$6,399	\$10,149
238350	\$0	\$389,210	\$0	\$0	\$389,210	\$172,687	\$561,897	\$17,653	\$579,551
238390	\$0	\$0	\$0	\$0	\$0	\$98,263	\$98,263	\$119,521	\$217,784
238910	\$0	\$9,500	\$0	\$0	\$9,500	\$3,786	\$13,286	\$244,848	\$258,134
238990	\$0	\$558	\$0	\$0	\$558	\$108,952	\$109,510	\$65,645	\$175,155
423220	\$0	\$5,775	\$0	\$0	\$5,775	\$0	\$5,775	\$0	\$5,775

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
423320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$226,658	\$226,658
423390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,227	\$70,227
423440	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,698	\$1,698
423450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$945,523	\$945,523
423610	\$0	\$24,882	\$0	\$0	\$24,882	\$0	\$24,882	\$0	\$24,882
423690	\$0	\$475	\$0	\$0	\$475	\$0	\$475	\$0	\$475
423850	\$0	\$0	\$0	\$0	\$0	\$39,866	\$39,866	\$0	\$39,866
424210	\$0	\$121,210	\$0	\$0	\$121,210	\$0	\$121,210	\$51,654	\$172,864
442291	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,764	\$2,764
445299	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,000	\$220,000
492110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,145	\$62,145
493190	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66,886	\$66,886
512240	\$0	\$0	\$0	\$0	\$0	\$1,513	\$1,513	\$0	\$1,513
518210	\$0	\$0	\$0	\$0	\$0	\$3,992	\$3,992	\$0	\$3,992
524114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,200,000	\$3,200,000
531210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170,297	\$170,297
541110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$260,000	\$260,000
541330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$963,418	\$963,418
541370	\$0	\$0	\$0	\$0	\$0	\$84,674	\$84,674	\$0	\$84,674
541380	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,300	\$4,300
541420	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,007	\$20,007
541430	\$0	\$0	\$0	\$0	\$0	\$25,068	\$25,068	\$5,756	\$30,824
541511	\$0	\$0	\$0	\$0	\$0	\$10,959	\$10,959	\$10,600	\$21,559

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
541512	\$0	\$0	\$0	\$0	\$0	\$121,634	\$121,634	\$616,953	\$738,587
541611	\$0	\$0	\$0	\$0	\$0	\$8,200	\$8,200	\$0	\$8,200
541612	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235,000	\$235,000
541613	\$0	\$0	\$0	\$0	\$0	\$135,469	\$135,469	\$968	\$136,436
541690	\$0	\$0	\$0	\$0	\$0	\$71,561	\$71,561	\$57,946	\$129,508
541810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
541930	\$0	\$0	\$0	\$0	\$0	\$123,072	\$123,072	\$10,924	\$133,996
561320	\$0	\$297,636	\$225,800	\$0	\$523,436	\$0	\$523,436	\$1,005,941	\$1,529,377
561410	\$0	\$0	\$0	\$0	\$0	\$140	\$140	\$0	\$140
561621	\$0	\$0	\$0	\$0	\$0	\$10,280	\$10,280	\$166,742	\$177,022
561720	\$0	\$417,814	\$0	\$0	\$417,814	\$0	\$417,814	\$405,087	\$822,901
561730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$221,003	\$221,003
561790	\$0	\$99,950	\$0	\$0	\$99,950	\$0	\$99,950	\$0	\$99,950
621511	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$390	\$390
621910	\$0	\$0	\$0	\$0	\$0	\$929,320	\$929,320	\$0	\$929,320
721110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$242,961	\$242,961
811310	\$0	\$0	\$0	\$0	\$0	\$964,890	\$964,890	\$0	\$964,890
Total	\$0	\$1,498,741	\$225,800	\$0	\$1,724,541	\$3,528,695	\$5,253,236	\$61,344,003	\$66,597,239

Source: CHA analysis of Harris 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
221330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
236220	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
237110	0.0%	0.0%	0.0%	0.0%	0.0%	94.9%	94.9%	5.1%	100.0%
237310	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238110	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%	19.2%	19.2%	80.8%	100.0%
238130	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	99.6%	100.0%
238140	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	13.7%	86.3%	100.0%
238150	0.0%	31.9%	0.0%	0.0%	31.9%	11.5%	43.4%	56.6%	100.0%
238160	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
238210	0.0%	0.9%	0.0%	0.0%	0.9%	1.3%	2.2%	97.8%	100.0%
238220	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	99.3%	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%	0.0%	0.0%	100.0%	100.0%
238320	0.0%	0.0%	0.0%	0.0%	0.0%	40.4%	40.4%	59.6%	100.0%
238330	0.0%	0.1%	0.0%	0.0%	0.1%	20.2%	20.3%	79.8%	100.0%
238340	0.0%	36.9%	0.0%	0.0%	36.9%	0.0%	36.9%	63.1%	100.0%
238350	0.0%	67.2%	0.0%	0.0%	67.2%	29.8%	97.0%	3.0%	100.0%
238390	0.0%	0.0%	0.0%	0.0%	0.0%	45.1%	45.1%	54.9%	100.0%
238910	0.0%	3.7%	0.0%	0.0%	3.7%	1.5%	5.2%	94.9%	100.0%
238990	0.0%	0.3%	0.0%	0.0%	0.3%	62.2%	62.5%	37.5%	100.0%
423220	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
423320	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423390	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423440	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423450	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
423610	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
423690	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
423850	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
424210	0.0%	70.1%	0.0%	0.0%	70.1%	0.0%	70.1%	29.9%	100.0%
442291	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
445299	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
492110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
493190	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
512240	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
524114	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
531210	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541370	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541380	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541420	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541430	0.0%	0.0%	0.0%	0.0%	0.0%	81.3%	81.3%	18.7%	100.0%
541511	0.0%	0.0%	0.0%	0.0%	0.0%	50.8%	50.8%	49.2%	100.0%
541512	0.0%	0.0%	0.0%	0.0%	0.0%	16.5%	16.5%	83.5%	100.0%
541611	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
541612	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541613	0.0%	0.0%	0.0%	0.0%	0.0%	99.3%	99.3%	0.7%	100.0%
541690	0.0%	0.0%	0.0%	0.0%	0.0%	55.3%	55.3%	44.7%	100.0%
541810	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
541930	0.0%	0.0%	0.0%	0.0%	0.0%	91.8%	91.8%	8.2%	100.0%
561320	0.0%	19.5%	14.8%	0.0%	34.2%	0.0%	34.2%	65.8%	100.0%
561410	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
561621	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	5.8%	94.2%	100.0%
561720	0.0%	50.8%	0.0%	0.0%	50.8%	0.0%	50.8%	49.2%	100.0%
561730	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
561790	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
621511	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
621910	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
721110	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
811310	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	100.0%
TOTAL	0.0%	2.3%	0.3%	0.0%	2.6%	5.3%	7.9%	92.1%	100.0%

Source: CHA analysis of Harris Health data

E. The Availability of M/WBEs in Harris Health's Geographic and Product Market

1. The Methodological Framework

Estimates of the availability of M/WBEs in Harris Health's geographic and product market are a critical component of Harris 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 subcontracts; general population is legally irrelevant. Availability estimates are also crucial should Harris 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 Harris 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 Houston's Certified Directory, and Harris Health Contract Data File to compile the Master Directory. We limited the firms we used in our analysis to those operating within Harris 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 Harris 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.¹⁶³ 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 Harris Health contracts. For an extended explanation of how unweighted and weighted availability are calculated, please see Appendix D.

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

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 Harris Health's product market;
2. The weights used to adjust the unweighted numbers;¹⁶⁴ and
3. The final estimates of the weighted averages of the individual six-digit level NAICS availability estimates in Harris Health's market area.

We "weighted" the availability data for two reasons. First, the weighted availability represents the share of total possible contractors for each demographic group, weighted by the distribution of contract dollars across the NAICS codes in which Harris 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 Harris 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 Harris 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 Harris 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 Harris Health spending in that NAICS code presented in Table 3-9. This share is the *weight*. Using the previous example, where Harris 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.

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

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

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE	Total
221330	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	7.1%	92.9%	100.0%
236220	10.7%	6.4%	4.1%	0.5%	21.7%	6.2%	27.9%	72.1%	100.0%
237110	5.2%	8.6%	1.2%	0.2%	15.2%	4.8%	20.0%	80.0%	100.0%
237310	11.0%	14.0%	4.1%	0.5%	29.4%	6.6%	36.0%	64.0%	100.0%
238110	4.8%	8.7%	1.0%	0.0%	14.5%	3.5%	18.0%	82.0%	100.0%
238120	5.3%	19.3%	4.7%	0.0%	29.3%	12.7%	42.0%	58.0%	100.0%
238130	2.6%	2.7%	0.6%	0.1%	6.0%	2.8%	8.7%	91.3%	100.0%
238140	1.2%	3.7%	0.2%	0.0%	5.2%	4.7%	9.9%	90.1%	100.0%
238150	0.5%	6.8%	0.9%	1.4%	9.5%	4.1%	13.6%	86.4%	100.0%
238160	1.5%	2.7%	0.2%	0.0%	4.4%	2.9%	7.3%	92.7%	100.0%
238210	2.8%	4.4%	0.7%	0.0%	7.9%	4.0%	12.0%	88.0%	100.0%
238220	1.4%	1.5%	0.1%	0.1%	3.0%	2.2%	5.3%	94.7%	100.0%
238290	3.1%	3.1%	0.8%	0.8%	7.9%	6.3%	14.2%	85.8%	100.0%
238310	6.8%	6.8%	0.7%	0.1%	14.5%	3.8%	18.3%	81.7%	100.0%
238320	4.0%	3.6%	0.4%	0.0%	8.0%	3.1%	11.1%	88.9%	100.0%
238330	10.2%	10.5%	1.2%	0.0%	21.8%	8.3%	30.2%	69.8%	100.0%
238340	1.0%	2.3%	0.0%	0.0%	3.3%	2.8%	6.1%	93.9%	100.0%
238350	3.7%	8.3%	1.5%	0.0%	13.5%	3.7%	17.2%	82.8%	100.0%
238390	2.6%	4.4%	0.0%	0.0%	7.0%	5.5%	12.5%	87.5%	100.0%
238910	12.4%	14.7%	1.2%	0.4%	28.7%	8.5%	37.2%	62.8%	100.0%
238990	2.0%	2.1%	0.5%	0.1%	4.6%	3.4%	8.0%	92.0%	100.0%
423220	0.3%	1.6%	1.3%	0.0%	3.2%	9.3%	12.5%	87.5%	100.0%
423320	2.3%	4.0%	1.1%	0.3%	7.6%	4.8%	12.4%	87.6%	100.0%
423390	7.5%	1.9%	0.9%	0.9%	11.2%	7.5%	18.7%	81.3%	100.0%
423440	0.3%	0.2%	0.1%	0.0%	0.5%	1.8%	2.3%	97.7%	100.0%
423450	7.2%	2.7%	3.5%	0.4%	13.8%	7.6%	21.5%	78.5%	100.0%
423610	2.2%	2.6%	1.2%	0.3%	6.3%	7.8%	14.1%	85.9%	100.0%
423690	0.8%	2.0%	1.5%	0.0%	4.3%	6.8%	11.0%	89.0%	100.0%
423850	4.1%	1.4%	0.6%	0.4%	6.4%	9.4%	15.8%	84.2%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE	Total
424210	1.5%	1.0%	0.7%	0.0%	3.2%	9.0%	12.1%	87.9%	100.0%
442291	1.0%	0.5%	0.0%	0.0%	1.4%	16.2%	17.6%	82.4%	100.0%
445299	0.2%	0.2%	0.5%	0.0%	0.9%	4.2%	5.0%	95.0%	100.0%
492110	8.0%	1.7%	0.3%	0.0%	10.1%	4.2%	14.2%	85.8%	100.0%
493190	0.4%	1.6%	0.0%	0.0%	2.0%	3.6%	5.6%	94.4%	100.0%
512240	2.6%	0.0%	0.0%	0.0%	2.6%	3.5%	6.1%	93.9%	100.0%
518210	3.0%	0.7%	2.5%	0.0%	6.1%	7.7%	13.9%	86.1%	100.0%
524114	0.0%	1.8%	0.0%	0.0%	1.8%	0.9%	2.7%	97.3%	100.0%
531210	0.9%	0.2%	0.1%	0.0%	1.2%	3.5%	4.7%	95.3%	100.0%
541110	0.9%	0.4%	0.3%	0.0%	1.6%	4.2%	5.8%	94.2%	100.0%
541330	3.9%	4.3%	4.9%	0.3%	13.4%	4.4%	17.9%	82.1%	100.0%
541370	1.5%	7.7%	6.5%	0.0%	15.8%	6.0%	21.7%	78.3%	100.0%
541380	1.3%	2.6%	3.2%	0.0%	7.1%	4.7%	11.8%	88.2%	100.0%
541420	8.1%	0.0%	0.0%	0.0%	8.1%	27.0%	35.1%	64.9%	100.0%
541430	3.1%	1.9%	1.5%	0.1%	6.6%	15.8%	22.4%	77.6%	100.0%
541511	2.5%	1.2%	5.0%	0.1%	8.7%	4.1%	12.8%	87.2%	100.0%
541512	4.4%	1.8%	4.7%	0.2%	11.1%	5.1%	16.2%	83.8%	100.0%
541611	4.6%	1.1%	1.0%	0.1%	6.7%	5.3%	12.0%	88.0%	100.0%
541612	15.6%	2.9%	1.3%	0.7%	20.4%	13.6%	34.0%	66.0%	100.0%
541613	2.7%	0.9%	0.4%	0.1%	4.1%	5.7%	9.8%	90.2%	100.0%
541690	5.1%	1.8%	2.1%	0.0%	9.0%	6.3%	15.2%	84.8%	100.0%
541810	3.0%	3.4%	0.4%	0.0%	6.7%	13.4%	20.2%	79.8%	100.0%
541930	2.2%	14.1%	0.5%	0.0%	16.8%	20.0%	36.8%	63.2%	100.0%
561320	10.0%	2.9%	3.2%	0.3%	16.3%	11.4%	27.7%	72.3%	100.0%
561410	7.8%	2.0%	1.0%	1.0%	11.8%	34.3%	46.1%	53.9%	100.0%
561621	3.1%	2.4%	1.0%	0.5%	6.9%	5.7%	12.6%	87.4%	100.0%
561720	6.2%	3.7%	0.5%	0.0%	10.5%	7.3%	17.8%	82.2%	100.0%
561730	3.2%	2.1%	0.1%	0.0%	5.4%	4.2%	9.6%	90.4%	100.0%
561790	2.0%	1.0%	0.2%	0.0%	3.2%	4.2%	7.4%	92.6%	100.0%
621511	0.6%	0.4%	0.8%	0.2%	2.1%	4.6%	6.7%	93.3%	100.0%

NAICS	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE	Total
621910	6.4%	0.5%	0.5%	0.0%	7.4%	5.0%	12.4%	87.6%	100.0%
721110	0.2%	0.0%	1.6%	0.0%	1.8%	1.7%	3.5%	96.5%	100.0%
811310	0.8%	0.8%	0.1%	0.1%	1.9%	2.8%	4.7%	95.3%	100.0%
Total	2.8%	2.1%	1.1%	0.1%	6.1%	4.7%	10.8%	89.2%	100.0%

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

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

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
221330	Steam and Air-Conditioning Supply	0.4%
236220	Commercial and Institutional Building Construction	47.4%
237110	Water and Sewer Line and Related Structures Construction	0.1%
237310	Highway, Street, and Bridge Construction	0.6%
238110	Poured Concrete Foundation and Structure Contractors	0.04%
238120	Structural Steel and Precast Concrete Contractors	0.1%
238130	Framing Contractors	0.6%
238140	Masonry Contractors	0.03%
238150	Glass and Glazing Contractors	0.3%
238160	Roofing Contractors	0.04%
238210	Electrical Contractors and Other Wiring Installation Contractors	12.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	11.4%
238290	Other Building Equipment Contractors	2.9%
238310	Drywall and Insulation Contractors	1.1%
238320	Painting and Wall Covering Contractors	0.8%
238330	Flooring Contractors	0.9%
238340	Tile and Terrazzo Contractors	0.02%
238350	Finish Carpentry Contractors	0.9%
238390	Other Building Finishing Contractors	0.3%
238910	Site Preparation Contractors	0.4%
238990	All Other Specialty Trade Contractors	0.3%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
423220	Home Furnishing Merchant Wholesalers	0.009%
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	0.3%
423390	Other Construction Material Merchant Wholesalers	0.1%
423440	Other Commercial Equipment Merchant Wholesalers	0.003%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	1.4%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0.04%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0.001%
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0.1%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.3%
442291	Window Treatment Stores	0.004%
445299	All Other Specialty Food Stores	0.3%
492110	Couriers and Express Delivery Services	0.1%
493190	Other Warehousing and Storage	0.1%
512240	Sound Recording Studios	0.002%
518210	Data Processing, Hosting, and Related Services	0.006%
524114	Direct Health and Medical Insurance Carriers	4.8%
531210	Offices of Real Estate Agents and Brokers	0.3%
541110	Offices of Lawyers	0.4%
541330	Engineering Services	1.4%
541370	Surveying and Mapping (except Geophysical) Services	0.1%
541380	Testing Laboratories	0.006%
541420	Industrial Design Services	0.03%
541430	Graphic Design Services	0.05%
541511	Custom Computer Programming Services	0.03%
541512	Computer Systems Design Services	1.1%
541611	Administrative Management and General Management Consulting Services	0.01%

NAICS	NAICS Code Description	WEIGHT (Pct Share of Total Sector Dollars)
541612	Human Resources Consulting Services	0.4%
541613	Marketing Consulting Services	0.2%
541690	Other Scientific and Technical Consulting Services	0.2%
541810	Advertising Agencies	0.1%
541930	Translation and Interpretation Services	0.2%
561320	Temporary Help Services	2.3%
561410	Document Preparation Services	0.0002%
561621	Security Systems Services (except Locksmiths)	0.3%
561720	Janitorial Services	1.2%
561730	Landscaping Services	0.3%
561790	Other Services to Buildings and Dwellings	0.2%
621511	Medical Laboratories	0.001%
621910	Ambulance Services	1.4%
721110	Hotels (except Casino Hotels) and Motels	0.4%
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	1.4%
TOTAL		100.0%

Source: CHA analysis of Harris 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 Harris Health's spending in its geographic and industry markets, is 19.5% for Harris Health's contracts. This overall, weighted M/WBE availability results can be used by Harris Health to determine its overall, annual aspirational M/WBE goal.

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

Black	Hispanic	Asian	Native American	MBE	White Women	M/WBE	Non-M/WBE	Total
6.8%	4.7%	2.4%	0.3%	14.3%	5.2%	19.5%	80.5%	100.0%

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

F. Disparity Analysis of M/WBEs for Harris 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.¹⁶⁵ 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.¹⁶⁶ 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 165 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.)

165. 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.").

166. 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 3-11 presents the disparity ratios for each demographic group. The disparity ratios for Blacks, Hispanics, Asians, Native Americans, MBEs, and M/WBEs are substantively significant. The ratios for M/WBEs and non-M/WBEs were statistically significant at the 0.01 and 0.001 levels, respectively.

Table 3-11: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE
Disparity Ratio	0.0% [‡]	48.5% [‡]	12.2% [‡]	0.0% [‡]	18.2% [‡]	101.2%	40.4% ^{**‡}	114.5% ^{***}

Source: CHA analysis of Harris Health data

**** Indicates statistical significance at the 0.001 level*

*** Indicates statistical significance at the 0.01 level*

‡ Indicates substantive significance

G. Conclusion

This Chapter presented the results of the CHA analysis of Harris Health contract data and customized availability database compiled from a variety of sources. Based on the statistical significance of the MBE and M/WBE results and the substantive significance of the results for Blacks, Hispanics, Asians, Native Americans, MBEs, and M/WBEs, we find the data as a whole support the conclusion that M/WBE firms have not reached parity in all aspects of Harris Health's contracting activities compared to non-M/WBE firms.

IV. ANALYSIS OF DISPARITIES IN THE HOUSTON METROPOLITAN 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.¹⁶⁷

This Chapter explores the data and literature relevant to how discrimination in the Houston Metropolitan Area economy affects the ability of minorities and women to fairly and fully engage in Harris Health’s contract opportunities. First, we analyze the rates at which Minority- and Woman-Owned Business Enterprises (“M/WBEs”) in the Houston Metropolitan 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 Harris Health to intervene in its market through contract goals is an analysis of the extent of disparities independent of the government’s intervention through its contracting affirmative action program.

The courts have repeatedly held that analysis of disparities in the rate of M/WBE formation in the government’s markets as compared to similar non-M/WBEs, disparities in M/WBE earnings, and barriers to access to capital markets are highly relevant to a determination of whether market outcomes are affected by race or gender ownership status.¹⁶⁸ Similar analyses supported the successful legal

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

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

defense of the Illinois Tollway's Disadvantaged Business Enterprise ("DBE") Program from constitutional challenge.¹⁶⁹

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.¹⁷⁰

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.¹⁷¹ "Evidence that private discrimination results in barriers to business formation is relevant because it demon-

169. *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).

170. *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).

171. *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868, at *64 (Sept. 8, 2005).

strates 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.”¹⁷²

To explore the question of whether firms owned by non-Whites and White women face disparate treatment in Harris Health’s marketplace outside of the agency’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.¹⁷³ We used the Houston metropolitan area as the geographic unit of analysis.

We found disparities in wages, business earnings and business formation rates for minorities and women in all industry sectors in Harris Health’s marketplace.¹⁷⁴

B. Disparate Treatment in the Houston Metropolitan 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 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.

172. *Id.*

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

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

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 2019.¹⁷⁵ 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 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

175. 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/>.

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.¹⁷⁶

In the following presentation of results, each sub-section first reports data on the share of a demographic group that forms a business (business formation rates); the probabilities that a demographic group will form a business relative to White men (business formation probabilities); the differences in wages received by a demographic group relative to White men (wage differentials); and the differences in business earnings received by a demographic group relative to White men (business earnings 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.

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

1. All Industries Combined in the Houston 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 Houston-The Woodlands-Sugarland Metropolitan Statistical Area.¹⁷⁷ Throughout this analysis of ACS data, there were not sufficient observations to make reliable estimates for business outcomes (*i.e.*, business formation rates; business formation probabilities; and business earnings) for Native Americans and Others. Consequently, for these groups in the tables, the values for these groups will be denoted as "----". 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 particular industry and identify the share of that sub-population forms businesses. For example, Table 4-1 indicates that 2.5% of Blacks forms businesses; this is less than the 5.2% business formation rate for White men. The Table indicates that White men have higher business formation rates compared to non-Whites and White women except for Asians. Table 4-2 utilizes probit regression analysis to examine the probability of forming a business after controlling for age, education, industry and occupation.¹⁷⁸ This Table indicates that, once again with the exception of Asians, non-Whites and White women are less likely to form businesses compared to White men; the reduced probability ranges from 1.5% for White women to 2.0% for Blacks. These results were statistically significant at the 0.01 level for Blacks, Hispanics, and White women. Asians were 0.6% more likely to form businesses compared to White men; however, this finding was not statistically significant.

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. Going back to Table 4-2, we find that the probability that Blacks form businesses is 2.0% less than the probability that White men form business. The statistical significance of this result is at the 0.001 level, which means we are 99.9% statistically confident the result is true. If a result is non-zero but the result is not statistically significant – such as the case for Asians, then we cannot rule out zero being the true result. Note: this does not mean the result is wrong, only that there is not a statistically significant level of confidence in the result.

177. This is the formal name for the nine-county MSA, which consists of the counties of Austin; Brazoria; Chambers; Fort Bend; Galveston; Harris; Liberty; Montgomery; and Waller.

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

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 education, age, industry, and occupation.¹⁷⁹ 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 23.3% (for Hispanics) to 38.4% (for Blacks) and all of the results are statistically significant at the 0.001 level. Table 4-4 indicates that non-Whites and White women receive business earnings less than White men. The reduction in earnings ranges from 51.4% (for White women) to 20.6% (for Asians). The results for Hispanics and White women were statistically significant.

Table 4-1: Business Formation Rates
All Industries, 2015 - 2019¹⁸⁰

Demographic Group	Business Formation Rates
Black	2.5%
Hispanic	2.2%
Native American	-----
Asian/Pacific Islander	5.6%
Other	-----
White Women	3.2%
Non-White Male	2.9%
White Male	5.2%

Source: CHA calculations from the American Community Survey

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	-2.0%***
Hispanic	-1.6%***
Native American	-----

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

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

Demographic Group	Probability of Forming a Business Relative to White Men
Asian/Pacific Islander	0.6%
Other	-----
White Women	-1.5%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 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	-38.4%***
Hispanic	-23.3%***
Native American	-26.9%***
Asian/Pacific Islander	-37.9%***
Other	-34.7%***
White Women	-34.6%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 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	-28.1%
Hispanic	-32.0%*
Native American	-----
Asian/Pacific Islander	-20.6%
Other	-----
White Women	-51.4%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

* Indicates statistical significance at the 0.05 level

2. The Construction Industry in the Houston Metropolitan Area

Table 4-5 indicates that White men have higher business formation rates compared to non-Whites and White women with the exception of Asians. Similarly, Table 4-6 indicates that non-Whites (except for Asians) and White women are less likely to form businesses compared to similarly situated White men. The reduced probabilities of business formation ranged from 3.4% to 0.1%. 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 52.1% to 17.7%. Five of these coefficients were statistically significant. Table 4-8 indicates that none of the business coefficients were statistically significant.¹⁸¹

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

Demographic Group	Business Formation Rates
Black	2.5%
Hispanic	3.1%
Native American	-----
Asian/Pacific Islander	9.1%
Other	-----
White Women	6.8%
Non-White Male	3.4%
White Male	8.6%

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	-3.4%
Hispanic	-1.9%
Native American	-----

181. The proper way to interpret a coefficient that is less than negative 100% (e.g., the value of the coefficients for Asians and White women in Table 4-8), is the percentage amount White men earn that is more than the group in question. In this case, White men earn 287% more than Asians and 219% more than White women.

Demographic Group	Probability of Forming a Business Relative to White Men
Asian/Pacific Islander	0.9%
Other	-----
White Women	-0.1%

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	-39.1%***
Hispanic	-23.5%***
Native American	-52.1%*
Asian/Pacific Islander	-17.7%**
Other	-39.8%
White Women	-47.1%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

* Indicates statistical significance at the 0.05 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	-21.7%
Hispanic	-87.0%
Native American	-----
Asian/Pacific Islander	-287.0%***
Other	-----
White Women	-219.0%*

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

* Indicates statistical significance at the 0.05 level

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

In this industry, there were insufficient observations to produce a reliable estimate for Hispanics. So, as with Native Americans and Others, the value of business outcomes for Hispanics is represented by “-----”. Table 4-9 indicates that White males had a higher business formation rate than Asians and White women but a lower business formation rate than Blacks. In Table 4-10, we see that Asians and White women have a lower business formation probability than White men; Blacks have a higher business formation probability than White men. None of these coefficients were statistically significant. Table 4-11 present data on wage differentials. Blacks, Hispanics, Asians, and White women earn lower wages than White men. The differentials range from 35.2% to 208% and all of these coefficients are statistically significant at the 0.001 level. Table 4-12 indicates the only statistically significant coefficient is that for Blacks; here business earnings for White men are 353% more than Blacks and the statistical significance is at the 0.05 level.

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

Demographic Group	Business Formation Rates
Black	5.7%
Hispanic	-----
Native American	-----
Asian/Pacific Islander	2.8%
Other	-----
White Women	1.9%
Non-White Male	2.9%
White Male	5.0%

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	3.2%
Hispanic	-----
Native American	-----
Asian/Pacific Islander	-1.6%
Other	-----
White Women	-0.8%

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	-35.2%***
Hispanic	-27.6%***
Native American	7.5%
Asian/Pacific Islander	-20.8%***
Other	13.6%
White Women	-31.9%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 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	-353.0%*
Hispanic	-----
Native American	-----

Demographic Group	Earnings Relative to White Men (% Change)
Asian/Pacific Islander	-31.4%
Other	-----
White Women	-88.3%

Source: CHA calculations from the American Community Survey

* Indicates statistical significance at the 0.05 level

4. The Goods Industry in Houston Metropolitan Area

Table 4-13 indicates that White men have higher business formation rates than all non-Whites and White women except for Asians. As presented in Table 4-14, Asians are the only group whose coefficient is statistically significant (at the 0.05 level) and it is positive, indicating that Asians have a 3.9% greater probability of forming a business compared to White men. Table 4-15 indicates that statistically significant results are found for four groups (Blacks; Hispanics; Asians; and White women) and all indicate lower wages relative to White men. The coefficients range from 42.4% to 22.6%. Table 4-16 indicates that while business earnings for each group was less than White men, none were statistically significant.

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

Demographic Group	Business Formation Rates
Black	2.2%
Hispanic	1.8%
Native American	-----
Asian/Pacific Islander	11.0%
Other	-----
White Women	2.1%
Non-White Male	2.9%
White Male	4.4%

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	-0.6%
Hispanic	0.04%
Native American	-----
Asian/Pacific Islander	3.9%*
Other	-----
White Women	-1.0%

Source: CHA calculations from the American Community Survey

* Indicates statistical significance at the 0.05 level

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

Demographic Group	Wages Relative to White Men (% Change)
Black	-42.4%***
Hispanic	-22.6%***
Native American	25.6%
Asian/Pacific Islander	-38.9%***
Other	-34.9%
White Women	-32.2%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 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	-17.6%
Hispanic	-7.9%
Native American	-----

Demographic Group	Earnings Relative to White Men (% Change)
Asian/Pacific Islander	-2.5%
Other	-----
White Women	-218.0%

Source: CHA calculations from the American Community Survey

5. The Services Industry in Houston Metropolitan Area

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 with the values ranging from 2.6% and 0.4% and three of the coefficients are statistically significant. Table 4-19 indicates that non-Whites and White women earn less than White men – ranging from 38.4% to 19.7% – and these coefficients were statistically significant at the 0.001 level. Table 4-20 indicates that non-White firms and White woman firms earned less than White male-owned firms; however only the coefficient for Hispanics was statistically significant.

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

Demographic Group	Business Formation Rates
Black	3.4%
Hispanic	2.5%
Native American	-----
Asian/Pacific Islander	5.9%
Other	-----
White Women	4.2%
Non-White Male	3.6%
White Male	7.8%

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	-2.6%***
Hispanic	-2.1%**
Native American	-----
Asian/Pacific Islander	-0.4%
Other	-----
White Women	-2.1%***

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

Demographic Group	Wages Relative to White Men (% Change)
Black	-32.9%***
Hispanic	-19.7%***
Native American	-38.4%***
Asian/Pacific Islander	-31.7%***
Other	-36.9%***
White Women	-28.7%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

**Table 4-20: 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	-10.3%
Hispanic	-45.5%*
Native American	-----
Asian/Pacific Islander	-25.7%
Other	-----
White Women	-48.9%

Source: CHA calculations from the American Community Survey

* Indicates statistical significance at the 0.01 level

6. The Information Technology Industry in the Houston Metropolitan Area

In this industry, there were insufficient observations to produce a reliable estimate for Blacks and Hispanics. So, as with Native Americans and Others, the value of business outcomes for Hispanics is represented by “-----”. Table 4-21 indicates that White men have higher business formation rates compared to Asians and 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 (with the values ranging from 29.6% to 13.7%) 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: Table 4-21 Business Formation Rates
Information Technology, 2015 - 2019**

Demographic Group	Business Formation Rates
Black	-----
Hispanic	-----
Native American	-----
Asian/Pacific Islander	5.2%
Other	-----

Demographic Group	Business Formation Rates
White Women	2.9%
Non-White Male	3.8%
White Male	6.2%

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	-1.2%
Other	-----
White Women	-2.0%

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	-17.4% ^{**}
Hispanic	-29.6% ^{***}
Native American	-20.3%
Asian/Pacific Islander	-13.7% ^{**}
Other	-18.0%
White Women	-17.6% ^{**}

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	-199.0%
Other	-----
White Women	-91.3%

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 Houston Metropolitan Area Marketplace: Evidence from the Census Bureau's 2017 Annual Business Survey

We further examined whether non-Whites and White women have disparate outcomes when they are active in the Houston Metropolitan 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.¹⁸² 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:^{183,184}

- 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

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

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

184. 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 Harris Health’s 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 women¹⁸⁵

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 firms 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 4-26.¹⁸⁶ If Black-owned

185. 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.

186. 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).

firms earned a share of sales equal to their share of total firms, the disparity index would have been 100%. An index less than 100% indicates that a given group is being utilized less than would be expected based on its availability, and courts have adopted the Equal Employment Opportunity Commission's "80% rule" that a ratio less than 80% presents a *prima facie* case of discrimination.¹⁸⁷ All of the 18 disparity ratios for non-White firms and White woman firms are below this threshold.¹⁸⁸

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

187. 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.").

188. 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%

	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
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%

	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
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 Hospital District contracts and subcontracts, as well as expand the capacities of their firms. As demonstrated by the analyses of Census Bureau data, above, discrimination may even prevent firms from forming in the first place.

There are extensive federal agency reports and much scholarly work on the relationship between personal wealth and successful entrepreneurship. There is a general consensus that disparities in personal wealth translate into disparities in business creation and ownership.¹⁸⁹ The most recent research highlights the mag-

189. 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.

nitude of the COVID-19 pandemic’s disproportionate impact on minority-owned firms.

1. Federal Reserve Board Small Business Credit Surveys¹⁹⁰

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*¹⁹¹ compiles results from the 2020 SBCS. The SBCS provides data on small business performance, financing needs, and decisions and borrowing outcomes.^{192,193} The Report provides results by four race/ethnicity categories: White, Black or African American, Hispanic or Latino, and Asian or Pacific Islander. For select key statistics, it also includes results for 4,531 non-employer firms, which are firms with no employees on payroll other than the owner(s) of the business.

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

190. 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).

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

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

193. 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.

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* finds 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.¹⁹⁴

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 SBCS¹⁹⁵ 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.

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

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

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

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 SBCS¹⁹⁶ 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.¹⁹⁷

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

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

197. *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.

- Not controlling for other firm characteristics, fewer minority-owned firms were profitable compared to non-minority-owned firms during the past two years.¹⁹⁸ 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.¹⁹⁹
- 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.²⁰⁰
- 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.²⁰¹
- 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.²⁰²
- Low credit score and lack of collateral were the top reported reasons for denial of applications by Black- and Hispanic-owned firms.²⁰³

ii. Non-employer firms²⁰⁴

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 location (census division and urban or rural location), and minority status.²⁰⁵

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

198. *Id.* at 3.
 199. *Id.* at 4.
 200. *Id.* at 5.
 201. *Id.* at 6.
 202. *Id.* at 9.
 203. *Id.* at 15.
 204. *Id.* at 18.
 205. *Id.* at 18.

- Black-owned firms were more likely to operate at a loss than other firms.²⁰⁶
- Black-owned firms reported greater financial challenges, such as obtaining funds for expansion, accessing credit and paying operating expenses than other businesses.²⁰⁷
- Black- and Hispanic-owned firms submitted more credit applications than White-owned firms.²⁰⁸

d. 2016 Small Business Credit Surveys

The 2016 Small Business Credit Survey²⁰⁹ 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.²¹⁰ 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. Demographics²¹¹

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 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%).²¹²

206. *Id.*

207. *Id.* at 19.

208. *Id.* at 20.

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

210. 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.

211. 2016 SBCS, at 2.

ii. Profitability Performance Index²¹³

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.

iii. Financial and Debt Challenges/Demands²¹⁴

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.

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

212. *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.

213. *Id.* at 3-4.

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

for non-minority-owned firms. Hispanic- and Black-owned firms reported the highest approval rates at online lenders.²¹⁵

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.

iv. Business Location Impact²¹⁶

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.

v. Non-employer Firms²¹⁷

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

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

216. *Id.* at 17.

217. *Id.* at 21.

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 Businesses²¹⁸

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 Industries²¹⁹

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.²²⁰

b. Profitability Challenges and Credit Risk Disparities²²¹

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.

c. Financial Challenges During the Prior Twelve Months²²²

Woman-owned firms were more likely to report experiencing financial challenges in the prior twelve months: 64% compared to 58% of male-

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

219. 2016 SBCS, at 1-5.

220. 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).

221. *Id.* at 6-7.

222. *Id.* at 8.

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 Differences²²³

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 Financing²²⁴

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 Financing²²⁵

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.

g. Lender Satisfaction²²⁶

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.

223. *Id.* at 10.

224. *Id.* at 16.

225. *Id.* at 14.

226. *Id.* at 26.

3. 2010 Minority Business Development Agency Report²²⁷

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.²²⁸

It also found, “the largest single factor explaining racial disparities in business creation rates are differences in asset levels.”²²⁹

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.²³⁰
- *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.²³¹
- *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.²³²

227. Fairlie, R. W. and Robb, A., “Disparities in Capital Access Between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs,” U.S. Department of Commerce, Minority Business Development Agency, 2010 (“MBDA Report” <https://archive.mbda.gov/sites/mbda.gov/files/migrated/files-attachments/DisparitiesinCapitalAccessReport.pdf>).

228. *Id.* at 17.

229. *Id.* at 22.

230. *Id.* at 5.

231. *Id.*

232. *Id.*

- *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.²³³

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 2003.²³⁴ 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.²³⁵

5. 2020 Small Business Administration Loans to African American Businesses

As detailed in a 2021 article published in the *San Francisco Business Times*,²³⁶ the number of loans to Black businesses through the SBA's 7(a) program²³⁷ decreased 35% in 2020.²³⁸ This was the largest drop in lending to any race or ethnic group tracked by the SBA. The 7(a) program is the SBA's primary program for financial assistance to small businesses. Terms and conditions, like the guaranty percentage and loan amount, vary by the type of loan. Lenders

233. *Id.*

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

235. 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).

236. SBA Loans to African American Businesses Decrease 35%, *San Francisco Business Times* (August 11, 2021) at: <https://www.bizjournals.com/sanfrancisco/news/2021/08/11/sba-loans-to-african-american-businesses-decrease.html>. Data were obtained through a Freedom of Information Act request.

237. Section 7(a) of the Small Business Act of 1953 (P.L. 83-163, as amended).

238. The total number of 7(a) loans declined 24%.

and borrowers can negotiate the interest rate, but it may not exceed the SBA maximum.²³⁹

Bankers, lobbyists, and other financial professionals attributed the 2020 decline to the impact of the PPP pandemic relief effort.²⁴⁰ The PPP loan program provided the source of relief to underserved borrowers through a direct incentive for small businesses to keep their workers on payroll.²⁴¹ Approximately 5.2M PPP loans were made in 2020, as compared with roughly 43,000 loans made through the 7(a) program.

In a published statement to the *Portland Business Journal*, the American Bankers Association, an industry trade group, noted that the 2020 decline in SBA 7(a) loans to Black-owned businesses is not a one-year anomaly; it has been declining for years at a much faster rate than 7(a) loans to other borrowers. The 2020 data²⁴² reveal that the number of SBA loans made annually to Black businesses has declined 90% since a 2007 peak, more than any other group tracked by the SBA. In that interval, the overall number of loans decreased by 65%.

The nation's four largest banks (JP Morgan Chase, Bank of America, Citigroup, and Wells Fargo), which hold roughly 35% of national deposits, made 41% fewer SBA 7(a) loans to Blacks in 2020.²⁴³

PPP loans served as a lifeline during the pandemic for millions of businesses. However, industry experts maintained that PPP loans detracted from more conventional SBA lending efforts that year. Wells Fargo provided more than 282,000 PPP loans to small businesses nationwide in 2020, with an average loan size of \$50,000. Wells Fargo, the most active lender for Black-owned businesses nationwide in 2020, saw its SBA loans to Blacks drop from 263 in 2019 to 162 in 2020. Bank of America, Chase, and Citigroup also reported fewer SBA loans to African American businesses in 2020.

While PPPs have been heralded for providing needed monies to distressed small and mid-size businesses, data reveals disparities in how loans were distributed.²⁴⁴ An analysis in 2020 by the *Portland Business Journal*, found that of

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- 239. The SBA caps the maximum spread lenders can charge based on the size and maturity of the loan. Rates range from prime plus 4.5% to prime plus 6.5%, depending on how much is borrowed.
 - 240. The Coronavirus Act, Relief, and Economic Security Act ("CARES Act"), required the SBA to issue guidance to PPP lenders to prioritize loans to small businesses owned by socially and economically disadvantaged individuals including Black-owned businesses. See 116-136, §1, March 27, 2020, 134 Stat. 281.
 - 241. PPP loans were used to help fund payroll costs, including benefits, and to pay for mortgage interest, rent, utilities, workers protection costs related to COVID-19, uninsured property damage costs caused by looting or vandalism during 2020 as well as certain supplier costs and operational expenses.
 - 242. The SBA denied the original request for information; however, the publication prevailed on appeal.
 - 243. Data obtained by the *Business Journal* does not include information from lenders who made less than ten loans in 2020.
 - 244. While PPP loans are administered by the SBA, they are disbursed primarily through banks.

all 5.2M PPP loans, businesses in neighborhoods of color received fewer loans and delayed access to the program during the early critical days of the pandemic.²⁴⁵ More recent analysis released by the Associated Press indicates that access for borrowers of color improved exponentially during the later rounds of PPP funding, following steps designed to make the program more accessible to underserved borrowers.

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.²⁴⁶
- 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.²⁴⁷
- 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.²⁴⁸

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.²⁴⁹

245. Many industry experts have observed that businesses that already had strong relationships with lenders were the most successful in accessing PPP loans. The nation's long history of systemic racism in banking fostered disparities in PPP loan distribution. See Alicia Plerhoples, *Correcting Past Mistakes: PPP Loans and Black-Owned Small Businesses*, at <https://www.acslaw.org/expertforum/correcting-past-mistakes-ppp-loans-and-black-owned-small-businesses/>.

246. See Bates, T., "Venture Capital Investment in Minority Business," *Journal of Money Credit and Banking* 40, 2-3 (2008).

247. Fairlie, R.W. and Robb, A., *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*, (Cambridge: MIT Press, 2008).

248. Fairlie, R.W. and Robb, A., *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*, (Cambridge: MIT Press, 2008).

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.²⁵⁰

Intergenerational links are also critical to the success of the businesses that do form.²⁵¹ Working in a family business leads to more successful firms by new owners. One study found that only 12.6% of Black business owners had prior work experiences in a family business as compared to 23.3% of White business owners.²⁵² 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.²⁵³ The U.S. Department of Commerce has reported that the ability to form strategic alliances with other firms is important for success.²⁵⁴ 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 Harris 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.

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- 249. 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.
 - 250. Hout, M. and Rosen, H. S., “Self-employment, Family Background, and Race,” *Journal of Human Resources*, Vol. 35, No. 4, 2000, pp. 670-692.
 - 251. 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.
 - 252. *Id.*
 - 253. 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.
 - 254. “Increasing MBE Competitiveness through Strategic Alliances” (Minority Business Development Agency, 2008).

V. QUALITATIVE EVIDENCE OF RACE AND GENDER BARRIERS IN HARRIS 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 Harris 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 entity 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."²⁵⁵ Evidence about discriminatory practices engaged in by prime contractors, government 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.²⁵⁶ 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."²⁵⁷ "[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."²⁵⁸

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

256. *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).

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

258. *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.”²⁵⁹ 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.”²⁶⁰

A. Business Owner Interviews

To explore this type of anecdotal evidence of possible discrimination against minorities and women in Harris Health’s geographic and industry markets, we conducted two small group interviews, totaling 11 participants. We sought to explore their experiences in seeking and performing public sector prime contracts and subcontracts with Harris Health, other government agencies, and in the private sector. We also elicited recommendations for increased opportunities to compete for Harris Health work.

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

I find that when I would go to places to speak and take my examiner with me who is not a Black person, all questions are directed to him.... They'd say things like, "Okay, we're going to give you our business. I'm sure your boss will be proud of you." The assumption was made that it was someone else's company and I was perhaps a sales person.

We don't typically say we are a Black-owned firm or we are a minority. Because, again, that's not why we're there.... But the gentleman said to me ... "go back and talk with your bosses and I'll be happy to have a conversation with them and go from there." And we looked at each other and we said, "Okay, we'll do just that. Thank you, thank you for your time."

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

260. *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).

I've found myself not even inserting, "I am the owner" or "I am the decision-maker" or what have you, I just have that conversation business to business versus any assertion of who's in charge. Whether that's for better or for worse or anything, it's almost allowed whomever to think whatever it is that they want to.... I don't necessarily say I'm the owner, I may say I'm the administrator because that is also my title as well.

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

I don't want to get awarded because I'm a minority. I want to get awarded because I'm a good company, I have a good product, you know? But my experience has been that I have not even gotten a chance to do that. Not even to do a trial or anything like so it's just frustrating.

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

There has to be somebody from the business or the manager's information technology [unit] who have to figure out that how will they channel all their requirements to all the approved vendors. And that has been a challenge for us because we have not been able to figure out who that might be. We had reached out to the person on the RFP document in terms of from procurement, but beyond that, we just don't know where to go.

One thing that would be really helpful is to have, maybe, like "Meet the Buyer" and the true buyer ... the decision-makers that can say, "Okay yes, I'll use you for this particular project." I think that would be very helpful because for me, I believe that it's about making the relationships or developing those relationships and so if we're able to start a relationship with the actual person that we're working with rather than the middle person... [Then it's not] "Oh, we're just a minority firm so that's why we need to have this opportunity." A direct meeting would really, really help us.

Have some periodical meetings, once a month, once a quarter.

Some M/WBEs felt that assertions about the importance of inclusion were not followed by concrete actions.

My experience has been that everybody's about diversity through healthcare, but in reality they don't call you or they don't give you a chance.

G[roup] P[urchasing] O[rganization]s tout that they're all about diversity and honestly, they asked me to go ahead and sign up with their program and I have, and we never get a call back.... It's just very frustrating because they talk about diversity, and I've been to those meetings and honestly you don't get any callbacks or anything like that.... For a company like ours, it would be very hard to compete against the GPOs, I tell you why, because I'm competing against multi-billion-dollar companies that are paying those GPOs lots of money for administration fees.

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 Houston 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.

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)

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)

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)

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)

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)

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)

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

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 women respondents reported difficulty in accessing networks and fostering relationships necessary for professional success and viability. This difficulty extended to Harris Health staff; respondents were unable to gain access to, and communicate with, key decision makers. Business owners frequently stated that Texas is a "good old boy" state.

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)

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)

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)

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)

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)

[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)

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 you just looking at goals, goals in itself, without enforcements, it's not effective. (Harris County, page 101)

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)

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)

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)

Prime vendors see the goal as the ceiling, not as the floor. (Dallas County, page 103)

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)

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)

Respondents also suggested approaches to increasing M/WBE opportunities and capacities.

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)

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)

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 Houston market area in general and in accessing Harris 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 Harris Health 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 Harris 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 HARRIS 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 Harris 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 Harris Health as compared to their availability in its market area, as well as business owners’ experiences in obtaining Harris Health work. We further analyzed M/WBEs’ opportunities in the overall Houston 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 Harris 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 Harris Health has a compelling interest in implementing a race- and gender-conscious contracting program. The record— both quantitative and qualitative— establishes that M/WBEs in Harris Health’s market area continue to experience significant disparities in their access to Harris Health contracts and private sector opportunities and to the resources necessary for business success. These results provide a sufficient evidentiary basis for the use of narrowly tailored remedial race- and gender-based measures to ensure equal opportunities for all firms to do business with Harris Health.

As a general matter, Harris Health should model its program on the recently adopted program for Harris County. This new program contains all the elements necessary to meet strict constitutional scrutiny and embodies best practices for narrowly tailored M/WBE programs, including eligibility standards; contract specific goal setting procedures; flexible standards for review of bids and proposals; counting rules for contract goal credit; contract performance monitoring standards and processes; prompt payment enforcement mechanisms; contract close out procedures; sanctions policies; vendor outreach; and an electronic contracting monitoring system.

Based on the results of this Study, federal case law and national best practices for M/WBE programs, we recommend the following elements of a narrowly tailored M/WBE program. Given the need for extensive resources to administer a legally compliant and well-run program, we urge Harris Health to enter into an Interlocal Agreement (“ILA”) with Harris County for the administration of several elements of Harris Health’s new program. We note below where efficiencies can be obtained using this approach.

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 entity’s remedial purposes. The following program elements 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 Harris Health can take.

Harris Health should immediately implement an existing electronic data collection system with the following functionality:

- 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 Harris 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 Harris Health staff, prime contractors and subcontractors to perform all necessary activities.

This is one element that can be outsourced to Harris County through the ILA.

2. Create a Senior Leadership Position to Oversee Business Diversity

Harris Health should create a new senior leadership position to oversee all efforts towards contracting diversity and inclusion. This new position should report directly to a member of the Harris Health System Executive Leadership team. This reporting structure will signal the importance of this function and provide it with the bureaucratic stature necessary to move new initiatives forward. This position should work very closely with Harris Health System Chief DE&I and all departments with contract related functions as well as Harris County Purchasing assigned to Harris Health. This position should also directly coordinate and interface with the Harris County Department of Economic Equity and Opportunity.

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

Harris Health should conduct vendor outreach and “matchmaking” events for its larger or highly specialized projects. M/WBEs and non-M/WBEs suggested in the interviews that they welcomed such opportunities. Targeted email blasts about upcoming opportunities would also be helpful. Harris Health’s opportunities should also be included in events and activities conducted by Harris County, under the ILA.

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 opportunities²⁶¹ is one race- and gender-neutral measure that will assist all firms to access information.

261. 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].

Further, potential vendors requested training in how to do business with Harris Health in particular. In addition to developing written materials for its website, Harris Health should hold sessions and create training videos that provide information on all aspects of its contracting program.

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 providing 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. 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 Houston area governments and organizations such as chambers of commerce, professional associations, community-based organizations, etc.

An important difference between the County's program and a program for Harris Health is that health systems contract with Group Purchasing Organizations ("GPOs"). To increase purchasing efficiencies and reduce costs, GPOs enter into large, national contracts on behalf of their members. This means that Harris Health does not directly contract and manage purchases through its GPO, and those dollars were not included in the analysis for this Report. Because Harris Health does not directly contract with GPO vendors, it cannot set contract goals or insist that firms be certified as M/WBEs by agencies it recognizes. However, GPOs have in recent years recognized the value of supplier diversity and are taking steps to be more inclusive in their contracting activities.²⁶²

Given this structure, Harris Health should provide technical assistance to M/WBEs that seek to do business with GPOs. Sessions or training videos that explain the GPO structure, how to contact its buyers and approaches to successful bid submissions would be useful for firms seeking more opportunities with health care organizations.

262. See <https://www.premierinc.com/newsroom/education/innovative-strategies-in-healthcare-amplifying-the-business-case-for-supplier-diversity>.

B. Implement Race- and Gender-Conscious Measures

The discussed above, the Study's results support the determination that the County has a strong basis in evidence to implement a race- and gender-conscious M/WBE Program. The disparity results are stark:

Table 6-32: Disparity Ratios by Demographic Group

	Black	Hispanic	Asian	Native American	MBE	White Woman	M/WBE	Non-M/WBE
Disparity Ratio	0.0% [‡]	48.5% [‡]	12.2% [‡]	0.0% [‡]	18.2% [‡]	101.2%	40.4% ^{**‡}	114.5% ^{***}

Source: CHA analysis of Harris Health data

**** Indicates statistical significance at the 0.001 level*

*** Indicates statistical significance at the 0.01 level*

‡ Indicates substantive significance

The results of the economy-wide analyses are equally compelling. Data from the Census Bureau's *Survey of Business Owners* indicate very large disparities between M/WBE firms and non-M/WBE firms when examining the sales of all firms, the sales of employer firms (firms that employ at least one worker), or the payroll of employer firms. Similarly, data from the Census Bureau's *American Community Survey* ("ACS") indicate that Blacks, Hispanics and White women were underutilized relative to White men. Controlling for other factors relevant to business outcomes, wages and business earnings were lower for these groups compared to White men. Data from the ACS further indicate that non-Whites and White women are less likely to form businesses compared to similarly situated White men.

Our interviews, for this Report and our other Texas studies, with M/WBEs about their experiences in the County's market area further revealed the existence of persistent barriers on the basis of race and/or gender. Many M/WBEs reported that they still encounter barriers based on race and/or gender and that without affirmative intervention to increase opportunities through contract goals, they will continue to be denied full opportunities to compete.

This overwhelming quantitative and anecdotal evidence presents the "strong basis in evidence" that the courts require to support a race- and gender-conscious relief. Without targeted efforts to reduce discriminatory barriers, minorities and women will likely continue to face diminished opportunities because of the race or gender of the firm's owner(s). We therefore recommend the adoption of a new Program with the following major elements.

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

Harris Health should set an annual, overall target for M/WBE utilization on its non-GPO 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 Harris Health funds. We found the weighted availability of M/WBEs to be 19.5%, which would support an overall goal of 20% 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, Harris 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, Harris 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 Harris 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 Harris Health 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.²⁶³

Contract goal setting is a function that could be outsourced through the ILA.

263. For a thorough explanation of how to set legally defensible and narrowly tailored contract goals, visit www.contractgoalsetting.com.

3. Adopt Narrowly Tailored Program Eligibility Standards

Program eligibility should be limited to firms that have a business presence in the Houston market area, as established by this Study, or that can demonstrate that they have done business within that market area.²⁶⁴

Harris 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 Houston. These are the certifications accepted by Harris County. However, it will be Harris Health's constitutional responsibility, to ensure that the certifications it accepts are from narrowly tailored programs with demonstrated integrity.

4. Implement 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 Harris 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 subcontractors at all tiers of performance and monitoring prompt payment obligations of prime contractors to subcontractors. Harris Health staff must perform site visits to meet these requirements.
- Criteria and processes for how non-performing, certified firms can be substituted during performance.

264. Harris Health's market consists of the four counties within the Houston metropolitan area – Harris, Galveston, Montgomery, and Fort Bend.

- 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.

Contract compliance and monitoring are functions that could be outsourced through the ILA.

5. Provide Training for all Harris Health Staff with Contracting Responsibilities or Vendor Interface

A new program will require an entity-wide roll out, 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 Harris 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 Harris Health to provide some formal training on these proposed new program elements, even if most of the program administration is outsourced to the County. 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, Harris Health should conduct a full and thorough review of the evidentiary basis for a new M/WBE program approximately every five to seven years.

Harris 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

Harris 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 Harris Health Systems, the analysis was limited to data from the Houston-the Woodlands-Sugarland MSA, which consists of Harris, Fort Bend, Montgomery, Liberty, Austin, Brazoria, Waller, Galveston, and Chambers 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.²⁶⁵ 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.

265. 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 Harris Health Systems 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.²⁶⁶ 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.

266. 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 A contains data on unweighted availability measured by the number of firms:

Table A

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 A). For example, the Black share of total firms in NAICS code AAAAAA is 2.1 percent (10/470). Table B presents the unweighted availability measure as a group’s share of all firms.

Table B

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%
CCCCC	2.1%	2.1%	3.8%	0.6%	3.6%	87.9%	100.0%
TOTAL	2.8%	3.2%	3.7%	0.8%	3.4%	86.1%	100.0%

Table C presents data on the agency's spending in each NAICS code:

Table C

NAICS	Total Dollars	Share
AAAAAA	\$1,000.00	22.2%
BBBBBB	\$1,500.00	33.3%
CCCCC	\$2,000.00	44.4%
TOTAL	\$4,500.00	100.0%

Each NAICS code's share of total agency spending (the last column in Table C) is the weight from each NAICS code that will be used in calculating the weighted availability. To calculate the overall weighted availability for each group, we first derive the every NAICS code component of a group's overall weighted availability. This is done by multiplying the NAICS code weight by the particular group's unweighted availability in that NAICS code. For instance, to determine NAICS code AAAAAA's component of the overall Black weighted availability, we would multiply 22.2 percent (the NAICS code weight) by 2.1 percent (the Black unweighted availability in NAICS code AAAAAA). The resulting number is 0.005 and this number is found in Table D under the cell which presents NAICS code AAAAAA's share of the Black weighted availability. The procedure is repeated for each group in each NAICS code. The calculation is completed by adding up each NAICS component for a particular group to calculate that group's overall weighted availability. Table D presents this information:

Table D

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/W/DBE
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 is converted into a percentage (*e.g.*, for the Black weighted availability: $0.028 * 100 = 2.8$ percent). Table E presents these results.

Table E

Black	Hispanic	Asian	Native American	White Women	Non-MWBE	Total
2.8%	2.9%	3.7%	0.8%	3.4%	86.4%	100.0%