



Parkland Health and Hospital System DISPARITY STUDY 2015



About the Study Team

Colette Holt & Associates (“CHA”) is a national law and consulting firm specializing in disparity studies, affirmative action contracting programs, expert witness services, compliance monitoring and strategic development related to inclusion, diversity and affirmative action. CHA is certified as a Disadvantaged Business Enterprise, Minority-Owned Business Enterprise and a Woman-Owned Business Enterprise by numerous agencies.

Nervi’ is a Dallas-based consulting firm specializing in Disadvantaged, Minority and Women Business programs, including outreach, community engagement, program development, project monitoring and certification issues. Nervi’ is certified as a Disadvantaged Business Enterprise, Minority-Owned Business Enterprise.

Acknowledgements

We wish to express special thanks to the following Parkland staff persons who assisted in the conduct of the study: Indira Hollingsworth, James Balfour and Shenita Cleveland.

Notice

Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified. No warranty is given as to the accuracy of such information. Public information, and industry and statistical data, including contracting, subcontracting, and procurement data, and anecdotal information, are from sources we deem to be reliable. CHA makes no representation as to the accuracy or completeness of such information and have accepted the information without further verification.

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I. EXECUTIVE SUMMARY

Colette Holt & Associates was retained by Parkland Health and Hospital System (“PHHS” of “Parkland”) to perform a study of possible disparities on the basis of race and gender in access to its prime contracting and associated subcontracting opportunities. We analyzed purchase order and contract data for calendar years 2011 through 2013. We explored whether Minority-Owned Business Enterprises (“MBEs”) and Women-Owned Business Enterprises (“WBEs”) (collectively, “M/WBEs”) have equal access to PHHS contracts, and if not, what remedies might be appropriate to redress the barriers created by race or gender discrimination.

A. Constitutional Standards

To be effective, enforceable and legally defensible, a race-based program must meet a judicial test of constitutional “**strict scrutiny**.” As first promulgated in *City of Richmond v. Croson*,¹ the test consists of two elements:

- The government has a “**compelling interest**” in remedying race discrimination due to:
 - Statistical evidence that shows underutilization of minority and women firms.
 - Anecdotal evidence that shows race-based barriers to full participation.
- Any remedies adopted must be “**narrowly tailored**” to that discrimination. To be deemed to be narrowly tailored, the program must satisfy 5 factors:
 - Race-neutral remedies must be used to the maximum feasible extent to overcome identified discrimination.
 - Goals must be related to the availability of M/WBEs.
 - Program beneficiaries must be related to the evidence.
 - Any adverse impact on third parties must be considered and no more burdensome than necessary.
 - The program cannot be of unlimited duration.

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

Parkland Health and Hospital System's ("PHHS") evidence and minority- and women-owned business enterprise program must be evaluated under these criteria.

B. Study Methodology and Data

The methodology for this study embodies the constitutional principles of strict scrutiny, as well as best practices for designing race- and gender-conscious contracting programs. Our approach has been specifically upheld by 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 for state departments of transportation.

To address the requirements of strict constitutional scrutiny applicable to M/WBE programs, we examined quantitative and qualitative evidence. We determined the availability of M/WBEs in Parkland's geographic and industry market area and whether there is a disparity between the availability of M/WBEs and the Parkland's utilization of these firms. We further analyzed disparities in the wider economy, where affirmative action is rarely practiced, to evaluate whether barriers continue to impede opportunities for minorities and women when remedial intervention is not imposed. We gathered anecdotal data on M/WBEs through focus groups with business owners and stakeholders, and interviews with PHHS staff. We also evaluated the M/WBE program and race- and gender-neutral policies and procedures for their effectiveness and conformance with constitutional parameters and national standards for M/WBE initiatives.

Based on the results of these extensive analyses, we make recommendations about whether a constitutional basis exists for continuing the use of race- and gender-based contracting efforts, and if so, what those efforts might be.

C. Study Findings

1. PHHS' M/WBE Program

PHHS' M/WBE program is contained in the Purchasing Manual, at section 6-202.19. Under the program, contractors are required to demonstrate to PHHS' satisfaction that it seek out, identify, and assist W/MBEs to become subcontractors and suppliers. In addition, contractors are prohibited from discriminating on the basis of race, sex, and other forbidden grounds. Violation of this clause can result in the termination of a contract for default. Other sections of the Manual require the inclusion of this clause in various kinds of procurements.

PHHS has been implementing goals since 1999. Currently, Parkland applies a 25 percent goal for goods and services contracts and a 30 percent goal for

construction. In some circumstances, the vendor is permitted to propose its own goal based on its determination of subcontracting opportunities. PHHS measures achievements based on the availability of subcontracting opportunities.

Consequently, contracts without such opportunities (*e.g.*, large capital equipment purchases, drugs) are not included in the base from which the 25 percent goal is calculated. While the construction contracts goal is also said to be based on the availability of contracting opportunities for W/MBEs, there is not a parallel specific exclusion of some kinds of work from the base for this goal.

If the prime contractor obtains W/MBE participation, it must submit a detailed form concerning the W/MBE's certification status, work to be performed, and dollar amount of participation. A contractor relying on good faith efforts to meet its obligations must submit a good faith efforts form that asks whether it solicited formal quotes or bids from W/MBEs at least 10 calendar days before the bid/proposal due date and whether it provided plans or specifications to W/MBEs in order to assist W/MBEs; a bidder may also mention other solicitation methods it may have used. The contractor must also list W/MBE quotes that were rejected, and why. These supplier diversity plans are required but not scored for firms that propose to self-perform the work; it is a pass/fail system. Plans can be amended after bid submission

To monitor compliance with its program, Parkland requires contractors to submit a post-award participation plan, including documentation of how W/MBEs will be identified if opportunities arise after contract award. Examples of ways of contacting W/MBEs include print advertisements, use of local chambers of commerce, and on-line media. The contractor must also describe the efforts it will make to ensure that W/MBEs have an equitable opportunity to compete for subcontracts after contract award. The contractor must also commit to follow this plan, participate in any surveys that Parkland requires, and submit periodic to PHHS concerning its compliance.

Administratively, the Vice-President for Strategic Sourcing is responsible for the goods and services portion of the program, while the Senior Vice-President for Facilities Development has a similar role in the construction side of the program. The Director for Supplier Diversity has a "dotted line" to the organization's Chief Financial Officer.

PHHS does not conduct its own W/MBE certification process, but rather relies on the determinations of eligibility made by other certifying agencies (*e.g.*, the DFW Minority Business Development Council) for this function.

Parkland implements several race- and gender-neutral measures. These include:

- Contacting one, two or three M/WBEs, depending on the dollar threshold.
- Soliciting firms directly through the supplier portal.

- Generating pre-solicitation notices on a case-by-case basis.
- Participating in outreach events to help inform local W/MBEs about doing business with the agency, including monthly “Let’s Talk Business” sessions where end user departments discuss specific topics, such as how to navigate the procurement process. Assist agencies and chambers of commerce are invited, as are individual firms in the Hospital’s database.

To explore the impacts of PHHS’ contracting policies and procedures and the implementation of the M/WBE program, we interviewed 62 individuals about their experiences and solicited their suggestions for changes. Major topics were the following:

- **Payments:** Most prime contractors reported that Parkland pays timely. However, retainage on construction contracts hurts all contractors but especially small subcontractors. PHHS was urged to release retainage on a rolling basis.
- **Access to information and firm outreach:** Most participants were able to access information on upcoming opportunities. Overall, outreach was felt to be adequate. Additional training and access to information on how to do business with PHHS was mentioned by some M/WBEs as a means to increase their participation.
- **Access to prime contracts:** It was especially difficult for M/WBEs and small firms to successfully bid on prime contracts. Bonding and insurance requirements and short lead times on solicitations are barriers. Some participants suggested supplier diversity should be involved directly the selection process to ensure fairness and equal application of standards. Debriefings for unsuccessful firms were one method to increase their capabilities for future work. M/WBEs and non-M/WBEs broadly supported adoption of a small business setaside program
- **Meeting M/WBE contract goals:** Most prime contractors and consultants reported that they were able to meet the goals. There was a strong consensus that PHHS should set goals on a contract-by-contract basis rather than generally applying the same goals regardless of the scopes of work of the project. The inability to count second tier and lower subcontracting dollars creates issues for general contractors and reduces opportunities for M/WBEs. While most prime vendors were aware that it is possible to seek a reduction in the goal by demonstrating their good faith efforts to meet the goal, the perception was that it is burdensome and difficult to establish good faith efforts. Supportive services such as bonding programs, quick pay, etc., were recommended by general contractors as support for their meeting contract goals. An electronic monitoring and

notification system like that used by the Dallas/Fort Worth Airport was suggested.

- **Contract performance monitoring and enforcement:** By in large, M/WBEs, non-M/WBEs and Parkland staff reported that there is little monitoring of actual usage of M/WBEs on its contracts. An electronic monitoring and notification system, including the ability to notify subcontractors that were listed by a successful prime contractor, was recommended; interview participants often pointed to the program implemented by Dallas/Fort Worth International Airport as a successful model. The M/WBE function needs to be elevated within PHHS' structure, according to several interviewees. An enhancement would be a system to notify subcontractors that were listed by a successful prime contractor.

2. Quantitative Evidence of Race and Gender Disparities in PHHS' Market

a. Examination of PHHS' Contracting Activities

A key component of our examination is a quantitative analysis of the contracts let by the agency. The goal of this analysis is to explore for any disparities between Parkland's use of non-white male firms and the availability of these firms. To examine this quantitative evidence we took the following steps:

- An initial examination of contracts let by Parkland to determine its product market area. Table A summarizes these data.
- An examination of states and counties where the firms that received contracts are located in order to determine PHHS' geographic market area. Tables B and C present this information.
- An examination of the contracts within Parkland's product and geographic market to determine how the contracts are distributed to M/WBE firms. Table D presents these data. This step also produces data on how Parkland's spending is distributed across industry sectors. These results—the share of total contract spending contained by each sector—provide the sector weight of total spending and these weights are used later in this quantitative analysis.
- An examination of all available firms in PHHS' product and geographic market. These data is disaggregated by industry sector and ownership of the firm and then weighted by the share of total contract spending contained in each sector. This produces the weighted availability contained in Table E.
- The determination of disparity ratios for each demographic group, based on the agency's utilization of M/WBEs, provided in Table D, and the

weighted availability, provided in Table E. These ratios are presented in Table F.

i. PHHS’ Industry and Geographic Markets

The courts require that a local agency limit its race-based remedial program to firms doing business in its geographic and industry markets. We therefore examined a sample of approximately \$408 million of Parkland spending to determine empirically the market areas.

We applied a “90/90/90” rule, whereby we analyzed North American Industry Classification System (“NAICS”) codes that cover over 90 percent of the total contract dollars; over 90 percent of the prime contract dollars; and over 90 percent of the subcontract dollars. We took this approach so that we could be assured that we provide an in depth picture of PHHS’ activities. Table A presents the distribution of the number of contracts and the amount of contract dollars across the 24 industry sectors that make up PHHS’ market. Chapter IV provides tables disaggregated by dollars paid to prime contractors and dollars paid to subcontractors.

Table A: NAICS Code Distribution of Contract Dollars, All Sectors

NAICS	NAICS Code Description	PCT Total Contract Dollars	Cumulative PCT Total Contract Dollars
524113	Direct Life Insurance Carriers	8.75%	8.75%
238220	Plumbing, Heating, and Air-Conditioning Contractors	6.40%	15.16%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	5.77%	20.93%
561720	Janitorial Services	5.73%	26.65%
238210	Electrical Contractors and Other Wiring Installation Contractors	5.57%	32.23%
561110	Office Administrative Services	5.24%	37.46%
561440	Collection Agencies	4.74%	42.20%
541611	Administrative Management and General Management Consulting Services	4.70%	46.90%
541310	Architectural Services	4.23%	51.13%
621610	Home Health Care Services	3.59%	54.72%
541618	Other Management Consulting Services	3.36%	58.08%
541511	Custom Computer Programming Services	2.80%	60.88%
325413	In-Vitro Diagnostic Substance Manufacturing	2.75%	63.63%
238310	Drywall and Insulation Contractors	2.36%	65.99%

237310	Highway, Street, and Bridge Construction	2.24%	68.23%
333316	Photographic and Photocopying Equipment Manufacturing	2.24%	70.47%
236220	Commercial and Institutional Building Construction	2.13%	72.60%
541219	Other Accounting Services	1.88%	74.48%
238290	Other Building Equipment Contractors	1.84%	76.32%
561320	Temporary Help Services	1.83%	78.15%
524298	All Other Insurance Related Activities	1.78%	79.93%
541810	Advertising Agencies	1.61%	81.54%
541330	Engineering Services	1.51%	83.05%
532291	Home Health Equipment Rental	1.42%	84.47%
541211	Offices of Certified Public Accountants	1.29%	85.77%
621112	Offices of Physicians, Mental Health Specialists	1.28%	87.05%
561499	All Other Business Support Services	1.15%	88.20%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	1.04%	89.24%
561621	Security Systems Services (except Locksmiths)	0.87%	90.11%
TOTAL			100.00%

Source: CHA analysis of PHHS data.

We next determined the locations of firms in these NAICS codes to establish the industries in which Parkland purchases. We applied the rule of thumb of identifying the firm locations that account for at least 75 percent of contract and subcontract dollar payments in the contract data file. Location was determined by ZIP code as listed in the file and aggregated into counties as the geographic unit.

Spending in Texas accounted for 75.66 percent of all contract dollars paid in the product market.

Table B: Distribution of Contracts in PHHS' Product Market by State

State	Share of Total Contract Dollars
TX	75.66%
VA	4.00%
NC	3.98%
IL	3.78%
FL	3.19%
MI	3.18%
IN	2.93%
KY	2.33%

CA	0.70%
MO	0.10%
CO	0.10%
Total	100.00%

Source: CHA analysis of PHHS data. Four states have less than 0.10%

Of that total, the counties of Dallas, Tarrant, Denton and Collin accounted for 81.28 percent. Therefore, these four counties constituted the geographic market area from which we drew our availability data. Table C presents data on how the contract dollars were spent across Texas counties.

Table C: Distribution of Contracts in PHHS' Product Market within Texas, by County

County	PCT of Total Contract Dollars Paid
Dallas	57.13%
Tarrant	13.08%
Denton	8.49%
Collin	2.58%
TOTAL	81.28%

Source: CHA analysis of PHHS data.

ii. PHHS' Utilization of M/WBEs in Its Market Areas

The next step was to determine the dollar value of Parkland utilization of M/WBEs in its market area constrained by geography and industry sector, as measured by payments to prime firms and associated subcontractors and disaggregated by race and gender. Because PHHS lacked full records for payments to subcontractors other than firms certified as M/WBEs, we contacted the prime vendors to request that they describe in detail their contract and associated subcontracts, including race, gender and dollar amount paid to date. We further developed a Master M/WBE Directory based upon lists solicited from dozens of agencies and organizations. We used the results of this extensive data collection process to assign minority or woman status to the ownership of each firm in the analysis.

Table D presents the distribution of contract dollars by industry sectors by race and gender. Chapter IV provides detailed breakdowns of these results.

**Table D: Distribution of Contract Dollars by Race and Gender, All Sectors
(share of total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/WBE
236118	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
236220	0.00%	67.42%	0.00%	0.00%	6.25%	26.33%
237110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
237310	0.00%	0.00%	0.00%	0.00%	0.41%	99.59%
238120	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
238140	0.00%	0.88%	0.00%	0.00%	0.00%	99.12%
238150	0.00%	0.00%	0.00%	0.00%	85.89%	14.11%
238160	0.00%	0.00%	0.00%	0.00%	0.12%	99.88%
238210	0.00%	0.21%	0.00%	0.00%	10.93%	88.86%
238220	0.00%	8.94%	0.00%	0.00%	0.00%	91.06%
238290	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
238310	0.00%	0.00%	0.33%	0.00%	0.06%	99.61%
238320	0.00%	29.74%	0.00%	0.00%	42.08%	28.18%
238910	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
325413	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
331110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
333316	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
423220	0.00%	0.00%	0.00%	0.00%	26.79%	73.21%
423690	0.00%	0.00%	0.00%	1.61%	0.00%	98.39%
444110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
524113	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
524298	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
532291	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
541211	2.61%	2.74%	0.00%	0.00%	94.65%	0.00%
541219	0.00%	0.00%	20.73%	0.00%	0.00%	79.27%
541310	14.84%	0.78%	9.44%	0.22%	2.36%	72.37%
541330	0.00%	18.04%	6.35%	0.00%	7.03%	68.58%
541511	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
541611	0.00%	0.00%	0.00%	0.00%	65.87%	34.13%
541618	0.00%	0.00%	15.86%	0.00%	0.00%	84.14%
541810	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
541990	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
561110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
561320	0.00%	4.35%	0.00%	0.00%	42.62%	53.04%
561440	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
561499	0.00%	0.00%	0.00%	0.00%	91.62%	8.38%
561621	0.00%	0.00%	0.00%	0.00%	60.27%	39.73%
561720	0.00%	0.06%	0.21%	0.00%	0.11%	99.62%
561990	0.00%	0.00%	0.00%	0.00%	34.81%	65.19%

621112	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
621610	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Total	0.69%	3.40%	4.42%	0.11%	9.40%	81.99%

Source: CHA analysis of PHHS data.

iii. Availability of M/WBEs in PHHS' Market

Using the “custom census” approach to estimating availability and the further assignment of race and gender using the Master Directory and misclassification adjustments, we determined the aggregated availability of M/WBEs, weighted by Parkland’s spending in its geographic and industry markets to be 19.71 percent. Table E presents the weighted availability data for various racial and gender categories.

**Table E: Aggregated Weighted Availability, All Sectors
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Women	M/WBE	Non-M/WBE	Total
TOTAL	5.89%	4.09%	1.81%	0.56%	7.36%	19.71%	80.28%	100.00%

Source: CHA analysis of PHHS data; Hoovers; CHA Master Directory.

iv. Disparity Analysis of PHHS' Utilization of M/WBEs

We next compared the utilization of M/WBEs with the availability of M/WBEs. 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 percent. Courts, including the Fifth Circuit, have looked to disparity indices in determining whether strict scrutiny is satisfied. An index less than 100 percent 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 percent” rule that a ratio less than 80 percent presents a *prima facie* case of discrimination, referred to as “substantive” significance.²

We determined that the disparity ratios were substantively significant for Blacks, Native Americans and M/WBEs as a group. Table F presents the results of this disparity analysis by demographic group for PHHS’ contracts.

² 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.”).

**Table F: Disparity Ratios by Demographic Group,
All Sectors**

	Disparity Ratio
Black	11.70%*
Hispanic	83.14%
Asian	244.25%
Native American	18.88%*
White Women	127.73%
M/WBE	91.38%
Non-M/WBE	102.13%

Source: CHA analysis of PHS data.

*Indicates substantive significance below the 0.80 level

b. Analysis of Race and Gender Disparities in the Texas Economy

We explored the data and literature relevant to how discrimination in PHS’ market and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in contract opportunities. First, we analyzed the earnings of minorities and women relative to White men; the rates at which M/WBEs in Texas form firms; and their earnings from those firms. Next, we summarized the literature on barriers to equal access to commercial credit. Finally, we summarized 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 overall marketplace discrimination without some type of affirmative interventions. Data and literature analyzed were the following:

- 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.
- Data from the Census Bureau’s American Community Survey (“ACS”) indicate that Blacks, Hispanics, Native Americans, Asian/Pacific Islanders, Others, and White women were underutilized relative to White men. Controlling for other factors relevant to business outcomes, wages and business earnings were lower for these groups compared to White men. Data from the ACS further indicate that non-Whites and White women are less likely to form businesses compared to similarly situated White men.
- The literature on barriers 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.

Taken together with other evidence such as anecdotal data from the Study interviews and other local disparity studies, this is the type of proof that addresses whether, in the absence of Parkland's strong remedial intervention in its market, it would be a passive participant in the discrimination systems found throughout Texas. These economy-wide analyses are relevant and probative to whether PHHS may continue to employ narrowly tailored race- and gender-conscious measures to ensure equal opportunities to access its contracts and associated subcontracts.

3. Qualitative Evidence of Race and Gender Disparities in PHHS' Market

In addition to quantitative data, the courts look to anecdotal evidence of firms' marketplace experiences to evaluate whether the effects of current or past discrimination continue to impede opportunities for M/WBEs. To explore this type of anecdotal evidence, we conducted five group interviews, totaling 48 participants. Most reported that while progress has been made in reducing barriers on the basis of race and gender, inequities remain significant obstacles to full and fair opportunities.

- **Access to business and professional networks:** Minorities and women reported that it remains difficult for them to access the networks and relationships necessary for entrepreneurial success. This was true for many participants not only about networks of other business owners and professional associations but also about Parkland staff.
- **Discriminatory attitudes and negative perceptions of competency:** Many minority and women owners reported they are stigmatized by their race and/or gender. Other business actors often display negative attitudes about their competency and professionalism. The assumption is that M/WBEs are less qualified and capable, and they are held to higher performance standards.
- **Obtaining work on an equal basis:** There was unanimous agreement among minority and women owners that goals remain necessary to level the playing field and equalize opportunities. M/WBEs sought the right to compete on a fair and equal basis. Without goals, they believed they would be shut out of PHHS' contracts. Some owners felt that prime contractors were not comfortable with minorities taking larger roles. Even M/WBEs who had accessed larger public projects through M/WBE programs reported that the relationships with prime contractors did not translate into private sector work. Prime contract opportunities were especially difficult for M/WBEs to obtain on a fair basis. One remedy endorsed by many participants would be setting aside some smaller

contracts for bidding only by small firms on a race- and gender-neutral basis.

II. LEGAL STANDARDS FOR CONTRACTING AFFIRMATIVE ACTION PROGRAMS

A. Summary of Constitutional Standards

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

- The government must establish its “compelling interest” in remedying 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.
- Any remedies adopted must be “narrowly tailored” to that discrimination, that is, the program must be directed at the types and depth of discrimination identified.³

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

- Statistical evidence of the underutilization of minority firms by the agency and/or throughout the agency’s geographic and industry market area compared to their availability in the market area. These are disparity indices, comparable to the type of “disparate impact” analysis used in employment discrimination cases.
- Anecdotal evidence of race-based barriers to the full and fair participation of minority firms in the market area and in seeking contracts with the agency, comparable to the “disparate treatment” analysis used in employment discrimination cases.⁴ Anecdotal data can consist of interviews, surveys, public hearings, academic literature, judicial decisions, legislative reports, etc.

The narrow tailoring requirement has been met through the satisfaction of five factors to ensure that the remedy “fits” the evidence:

- The efficacy of race-neutral remedies at overcoming identified discrimination.
- The relationship of numerical benchmarks for government spending to the availability of minority- and women-owned firms and to subcontracting goal setting procedures.

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

⁴ *Id.* at 509.

- The congruence between the remedies adopted and the beneficiaries of those remedies.
- Any adverse impact of the relief on third parties.
- The duration of the program.⁵

In *Adarand v. Peña*,⁶ the Supreme Court extended the analysis of strict scrutiny to race-based federal enactments such as the Disadvantaged Business Enterprise (“DBE”) program for federally-assisted transportation contracts. Just as in the local government context, the national government must have a compelling interest for the use of race and the remedies adopted must be narrowly tailored to the evidence relied upon.

In general, courts have subjected preferences for Women-Owned Business Enterprises (“WBEs”) to “intermediate scrutiny.” Gender-based classifications must be supported by an “exceedingly persuasive justification” and be “substantially related” to the objective.⁷ However, appellate courts have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program.⁸ Therefore, we advise that Parkland evaluate gender-based remedies under the strict scrutiny standard.

Classifications not based on race, ethnicity, religion, national origin or gender are subject to the lesser standard of review of “rational basis” scrutiny, because the courts have held there are no equal protection implications under the Fourteenth Amendment for groups not subject to systemic discrimination.⁹ In contrast to strict scrutiny of government action directed towards persons of “suspect classifications” such as racial and ethnic minorities, rational basis means the governmental action must only be “rationally related” to a “legitimate” government interest. Thus, preferences for persons with disabilities, veterans, etc. may be enacted with vastly less evidence than race- or gender-based measures to combat historic discrimination.

Unlike most legal challenges, the defendant has the initial burden of producing “strong evidence” in support of a race-conscious program.¹⁰ 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

⁵ *United States v. Paradise*, 480 U.S. 149, 171 (1987).

⁶ *Adarand v. Peña*, 515 U.S. 200 (1995).

⁷ *Cf. United States v. Virginia*, 518 U.S. 515 (1996).

⁸ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 720 (7th Cir. 2007) (“*Northern Contracting III*”).

⁹ *United States v. Carolene Products Co.*, 304 U.S. 144 (1938).

¹⁰ *Aiken v. City of Memphis*, 37 F.3d 1155, 1162 (6th Cir. 1994).

unconstitutional.¹¹ “[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.”¹² A plaintiff “cannot meet its burden of proof through conjecture and unsupported criticism of [the government’s] evidence.”¹³ 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 highway contracts. Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.”¹⁴ When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.¹⁵ A plaintiff cannot rest upon general criticisms of studies or other evidence; it must carry the case that the government’s proof is inadequate to meet strict scrutiny, rendering the legislation or governmental program illegal.¹⁶

There is no need of formal legislative findings of discrimination,¹⁷ nor “an ultimate judicial finding of discrimination before [a local government] can take affirmative steps to eradicate discrimination.”¹⁸

To meet strict scrutiny, studies have been conducted that 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 women-owned firms and their actual utilization compared to white male-owned businesses. Quality studies also examine the elements of the agency’s programs to determine whether they are sufficiently narrowly tailored. The following is a detailed discussion of the parameters for conducting studies leading to defensible programs that can

¹¹ *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1166 (10th Cir. 2000), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941 (2001) (“*Adarand VII*”); *W.H. Scott Construction Co., Inc. v. City of Jackson, Mississippi*, 199 F.3d 206, 219 (5th Cir. 1999).

¹² *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 916 (11th Cir. 1997) (“*Engineering Contractors I*”).

¹³ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 989, *cert. denied*, 540 U.S. 1027 (2003) (10th Cir. 2003) (“*Concrete Works II*”).

¹⁴ *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

¹⁵ *Engineering Contractors II*, 122 F.3d at 916; *Coral Construction Co. v. King County*, 941 F.2d 910 921 (9th Cir. 1991).

¹⁶ *Adarand VII*, 228 F.3d at 1166; *Engineering Contractors II*, 122 F.3d at 916; *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1522-1523 (10th Cir. 1994) (“*Concrete Works I*”); *Webster v. Fulton County, Georgia*, 51 F.Supp.2d 1354, 1364 (N.D. Ga. 1999); *see also Wygant v. Jackson Board of Education*, 476 U.S. 267, 277-278 (1986).

¹⁷ *Webster*, 51 F.Supp.2d at 1364.

¹⁸ *Concrete Works II*, 36 F.3d at 1522.

establish PHHS' compelling interest in remedying discrimination and developing narrowly tailored initiatives.

B. City of Richmond v. J.A. Croson Co.

The U.S. Supreme Court in the case of the *City of Richmond v. J.A. Croson Co.* established the constitutional contours of permissible race-based public contracting programs. Reversing long established law, 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 benefits these historic victims of discrimination. Strict scrutiny requires that a government entity prove both its "compelling interest" in remedying identified discrimination based upon "strong evidence," 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 that required prime contractors awarded City construction contracts to subcontract at least 30 percent of the project to Minority-Owned Business Enterprises ("MBEs"). A business located anywhere in the country which was at least 51 percent owned and controlled by "Black, Spanish-speaking, Oriental, Indian, Eskimo, or Aleut" citizens was eligible to participate. The Plan was adopted after a public hearing at which no direct evidence was presented that the City had discriminated on the basis of race in awarding 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 percent 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) general 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 illegal conduct:

[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.¹⁹

Strict scrutiny of race-based remedies is required to determine whether racial classifications are in fact motivated by either notions of racial inferiority or blatant racial politics. This highest level of judicial review “smokes out” illegitimate uses of race by assuring that the legislative body is pursuing a goal important enough to warrant use of a highly suspect tool.²⁰ It further ensures that the means chosen “fit” this compelling goal so closely that there is little or no possibility that the motive for the classification was illegitimate racial prejudice or stereotype. The Court made clear that strict scrutiny seeks to expose racial stigma; racial classifications are said to create racial hostility if they are based on notions of racial inferiority.²¹

Race is so suspect a basis for government action that more than “societal” discrimination is required to restrain racial stereotyping or pandering. The Court provided no definition of “societal” discrimination or any guidance about how to recognize the ongoing realities of history and culture in evaluating race-conscious programs. The Court simply asserted that:

[w]hile there is no doubt that the sorry history of both private and public discrimination in this country has contributed to a lack of opportunities for black entrepreneurs, this observation, standing alone, cannot justify a rigid racial quota in the awarding of public contracts in Richmond, Virginia.... [A]n amorphous claim that there has been past discrimination in a particular industry cannot justify the use of an unyielding racial quota. It is sheer speculation how many minority firms there would be in Richmond absent past societal discrimination.²²

Richmond’s evidence was found to be lacking in every respect. 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

¹⁹ 488 U.S. at 491-92.

²⁰ 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 decision maker for the use of race in that particular context.”).

²¹ 488 U.S. at 493.

²² *Id.* at 499.

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, Richmond 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, whereas a local government is further constrained by the Amendment's Equal Protection Clause.

In the case at hand, the City has not ascertained how many minority enterprises are present in the local construction market nor the level of their participation in City construction projects. The City points to no evidence that qualified minority contractors have been passed over for City contracts or subcontracts, either as a group or in any individual case. Under such circumstances, it is simply impossible to say that the City has demonstrated "a strong basis in evidence for its conclusion that remedial action was necessary."²³

The foregoing analysis was applied only to Blacks. The Court then emphasized that there was "absolutely no evidence" 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."²⁴

Having found that Richmond had not presented evidence in support of its compelling interest in remedying discrimination—the first prong of strict scrutiny—the Court went on to make 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 percent quota had no basis in evidence, and was applied regardless of whether the individual MBE had suffered discrimination.²⁵ Further, Justice O'Connor rejected the argument that individualized consideration of Plan eligibility is too administratively burdensome.

Apparently recognizing that the opinion might be misconstrued to categorically 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

²³ *Id.* at 510.

²⁴ *Id.*

²⁵ See *Grutter*, 529 U.S. at 336-337 (quotas are not permitted; race must be used in a flexible, non-mechanical way).

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 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.²⁶

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.²⁷ 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.²⁸

This contention has been rejected explicitly by some courts. For example, in denying the plaintiff's summary judgment motion to enjoin the City of New York's M/WBE construction ordinance, the court stated that:

[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

²⁶ 488 U.S. at 509 (citations omitted).

²⁷ *Id.* at 502.

²⁸ *See, e.g., Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 723 (7th Cir. 2007) ("*Northern Contracting III*").

comparison of the minority population in its entirety in Richmond, Virginia (50%) with the number of contracts awarded to minority businesses (.67%). There were no statistics presented regarding 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*.²⁹

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 subcontracting 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 CFR Part 26 "provides for a flexible system of contracting goals that contrasts sharply with the rigid quotas invalidated in *Croson*."³⁰

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. Gender-Conscious Programs

Whether affirmative action procurement programs that benefit women are subject to the lesser constitutional standard of "intermediate scrutiny" has yet to be settled by the Supreme Court.³¹ Most courts, including the Fifth Circuit,³² have applied intermediate scrutiny to preferences for women and then upheld or struck

²⁹ *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").

³⁰ *Western States Paving Co., Inc. v. Washington Department of Transportation*, 407 F.3d 983, 994 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006).

³¹ Cf. *United States v. Virginia*, 518 U.S. 515 (1996) (applying standard of "exceedingly persuasive justification" in striking down Virginia Military Institute's males only admissions policy).

³² *Scott*, 199 F.3d at 215 n.9.

down the female preference under that standard.³³ However, the Sixth Circuit has applied strict scrutiny to gender preferences.³⁴

D. Burdens of Production and Proof

Unlike most legal challenges, the defendant has the initial burden of producing “strong evidence” in support of the program.³⁵ As noted by the Fifth Circuit, 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.³⁶ “[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.”³⁷ A plaintiff “cannot meet its burden of proof through conjecture and unsupported criticism of [the government’s] evidence.”³⁸ For example, in the challenge to the Minnesota and Nebraska DBE programs, “plaintiffs³⁹ 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 highway contracts. Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.”⁴⁰

Most recently, the court in rejecting a challenge to the Illinois Tollway’s program likewise held plaintiff would have to come forward with “credible, particularized evidence of its own, such as a neutral explanation for the disparity, or contrasting statistical data. [citation omitted] Midwest fails to make this showing here.”⁴¹ Plaintiff offered only conjecture that the defendants’ studies’ supposed failure to account for capacity may or may not have impacted the studies’ results. Plaintiff

³³ See, e.g., *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2004 U.S. Dist. LEXIS, 3226 at * 44 (N.D. Ill., Mar. 3, 2004) (“*Northern Contracting I*” (women’s status as presumptively socially disadvantaged passes intermediate scrutiny); *Engineering Contractors II*, 122 F.3d at 907-910; *Concrete Works II*, 36 F.3d at 1519; *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, 6 F.3d 990, 1009 (3rd Cir. 1993) (“*Philadelphia II*”); *Coral Construction*, 941 F.2d at 930-931.

³⁴ *Brunet v. City of Columbus*, 1 F.3d 390, 404 (6th Cir. 1993).

³⁵ *Aiken v. City of Memphis*, 37 F.3d 1155, 1162 (6th Cir. 1994).

³⁶ *Adarand VII*, 228 F.3d at 1166; *Scott*, 199 F.3d at 219.

³⁷ *Engineering Contractors II*, 122 F.3d at 916; see also *West Tennessee Chapter of Associated Builders and Contractors, Inc. v. City of Memphis*, 302 F.Supp.2d 860, 864 (W.D. Tenn. 2004).

³⁸ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 989, cert. denied, 540 U.S. 1027 (2003) (10th Cir. 2003) (“*Concrete Works IV*”); *H.B. Rowe, Inc. v. Tippett*, 2008 U.S. Dist. LEXIS 100569 at * 27 (E.D. N.C. 2008) (“*Rowe I*”).

³⁹ The plaintiffs in both cases were represented by the same counsel and attempted to rely upon the same consultant.

⁴⁰ *Sherbrooke*, 345 F.3d at 970.

⁴¹ *Midwest Fence, Corp. v. USDOT et al.*, 2015 WL 1396376, *17 (N. D. Ill. March 24, 2015).

“fail[ed] to provide any independent statistical analysis or other evidence demonstrating actual bias.”⁴²

E. Establishing a “Strong Basis in Evidence” for PHHS Minority- And Women-Owned Business Enterprise Program

It is well established that disparities in an agency’s utilization of Minority- and Women-Owned Business Enterprises (“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 on M/WBEs and the disparate treatment of such firms by actors critical to their success will meet strict scrutiny. Discrimination must be shown using statistics and economic models to examine the effects of systems or markets on different groups, as well as by evidence of personal experiences with discriminatory conduct, policies or systems.⁴³ 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.⁴⁴

Croson’s admonition that “mere societal” discrimination is not enough to meet strict scrutiny does not apply 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.”⁴⁵

Nor must a government prove that it is itself guilty of discrimination to meet its burden. In upholding Denver’s M/WBE construction program, the court 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.”⁴⁶ 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.

⁴² *Id.* at *18.

⁴³ *Adarand VII*, 228 F.3d at 1166 (“statistical and anecdotal evidence are appropriate”).

⁴⁴ *Id.*

⁴⁵ *Concrete Works IV*, 321 F.3d at 976.

⁴⁶ *Id.* at 977.

The following are the evidentiary elements courts have looked to in examining the basis for and determining the constitutional validity of race- and gender-conscious programs and the steps in performing a disparity study necessary to meet these elements.

1. Define PHHS' Market Area

The first step is to determine the market areas in which PHHS 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.⁴⁷ The agency 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.⁴⁸

A commonly accepted definition of geographic market area for disparity studies is the locations that account for at least 75 percent of the agency's contract and subcontract dollar payments.⁴⁹ Likewise, the accepted approach is to analyze those detailed industries that make up at least 75 percent of the prime contract and subcontract payments for the Study period.⁵⁰

2. Examine Disparities between M/WBE Availability and PHHS Utilization of M/WBEs

Next, the study must estimate the availability of minorities and women to participate in PHHS' contracts and its history of utilizing M/WBEs as prime contractors and associated subcontractors. The primary inquiry is whether there are statistically significant disparities between the availability of M/WBEs and the utilization of such firms.

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

⁴⁷ *Croson*, 488 U.S. at 508.

⁴⁸ *Concrete Works II*, 36 F.3d at 1520 (to confine data to strict geographic boundaries would ignore "economic reality").

⁴⁹ "Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program," Transportation Research Board of the National Academy of Sciences, NCHRP Report, Issue No. 644, 2010, p. 49 ("National Disparity Study Guidelines").

⁵⁰ *Id.* at pp. 50-51.

case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.⁵¹

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, including the Fifth Circuit Court of Appeals, have looked to disparity indices in determining whether strict scrutiny is satisfied.⁵² An index less than 100 percent 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 percent” rule that a ratio less than 80 percent presents a *prima facie* case of discrimination.⁵³

The first step in the disparity analysis is to calculate the availability of minority- and women-owned firms in PHHS’ geographic and industry market area. 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.⁵⁴

The second step is to determine whether there are disparities between the availability estimates and PHHS’ utilization of M/WBEs. Where possible, statistical techniques are applied to examine whether any disparities are significant.

While there have been few cases in this area in the Fifth Circuit, we note that the failure to engage in this type of statistical analysis led to the demise of the City of Jackson’s program many years ago. The City had adopted a MBE program and set a 15 percent overall goal for City contracts. It had commissioned and then rejected a disparity study, and no other evidentiary efforts were made to support the continued application of the program. After holding the plaintiff had standing to pursue his case because his low bid providing one percent DBE participation had been rejected, the Fifth Circuit upheld the district court’s ruling that Jackson’s

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

⁵² *Scott*, 199 F.3d at 218; see also *Concrete Works II*, 36 F.3d at 1526-1527; *O’Donnell Construction Co., Inc., v. District of Columbia*, 963 F.2d 420, 426 (D.C. Cir. 1992); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 916 (11th Cir. 1990), *cert. denied*, 498 U.S. 983 (1990).

⁵³ 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.

⁵⁴ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868 at * 70 (Sept. 8, 2005) (“*Northern Contracting II*”) (IDOT’s custom census approach was supportable because “discrimination in the credit and bonding markets may artificially reduce the number of M/WBEs”).

failure to rely upon a study was fatal to its argument that it had a strong basis in evidence.

Many plaintiffs have argued that studies must somehow control for “capacity” of M/WBEs to perform specific agency contracts. The definition of “capacity” has varied based upon the plaintiff’s particular point of view, but it has generally meant bonding limits, firm size, firm revenues, and prior experience on agency projects. This test has been rejected by the courts when directly addressed by the plaintiff and the agency. The courts have recognized that size and experience are not race- and gender-neutral variables. 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. It is these types of “capacity” variables where barriers to full and fair opportunities to compete will be manifested. Based on expert testimony, judges understand that factors such as size and experience are not race- and gender-neutral variables: “M/WBE construction firms are generally smaller and less experienced *because of* discrimination.”⁵⁵ 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. Capacity variables at the economy-wide level of business formation and earnings, not at the first stage of the analysis, to reduce the downward bias that discrimination imposes on M/WBEs’ availability and the upward bias enjoyed by non-M/WBEs.

Additionally, *Croson* does not “require disparity studies that measure whether construction firms are able to perform a *particular contract*.”⁵⁶

The agency need not prove that the statistical inferences of discrimination are “correct.” In upholding Denver’s M/WBE Program, the Tenth Circuit noted that strong evidence supporting Denver’s determination that remedial action was necessary need not have been based upon “irrefutable or definitive” proof of discrimination. Statistical evidence creating inferences of discriminatory motivations was sufficient and therefore evidence of market area discrimination was properly used to meet strict scrutiny. To rebut this type of evidence, the plaintiff must prove by a preponderance of the evidence that such proof does not support those inferences.⁵⁷

Nor must the government demonstrate that the “ordinances will *change* discriminatory practices and policies” in the local market area; such a test would

⁵⁵ *Concrete Works IV*, 321 F.3d at 983 (emphasis in the original).

⁵⁶ *Id.* at 987-88 (emphasis in the original).

⁵⁷ *Id.* at 971.

be “illogical” because firms could defeat the remedial efforts simply by refusing to cease discriminating.⁵⁸

PHHS 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.⁵⁹

Similarly, statistical evidence by its nature cannot identify the individuals responsible for the discrimination.⁶⁰

3. Examine Economy-Wide Evidence of Race- and Gender-Based Disparities

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 whether the market functions properly for all firms regardless of the race or gender of their ownership. These analyses contributed to the successful defense of Chicago’s construction program.⁶¹ As 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

⁵⁸ *Id.* at 973 (emphasis in the original).

⁵⁹ *Id.* at 971.

⁶⁰ *Id.* at 973.

⁶¹ *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 met compelling interest using this framework).

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.⁶²

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. “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.”⁶³ 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.”

For example, in unanimously upholding the USDOT DBE Program, 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.⁶⁴ 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

⁶² *Adarand VII*, 228 F.3d at 1168-69.

⁶³ *Id.*

⁶⁴ *Id.*; *Western States*, 407 F.3d at 993; *Northern Contracting I*, 2004 U.S. Dist. LEXIS 3226 at *64.

to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.⁶⁵

These analyses are particularly relevant where an agency, like Parkland, has been implementing a race- and gender-conscious program that set contract goals. There may well not be large disparities between M/WBE availability and their utilization on agency contracts because of the operation of the remedial program. That does not end the study's inquiry. Where the government has been implementing affirmative action remedies, M/WBE utilization reflects those efforts; it does not signal the end of discrimination. Any M/WBE "overutilization" on projects with goals goes only to the weight of the evidence because it reflects the effects of a remedial program.

For example, Denver presented evidence that goals and non-goals projects were similar in purpose and scope and that the same pool of contractors worked on both types. "Particularly persuasive" was evidence that M/WBE participation declined significantly when the program was amended in 1989; the utilization of M/WBEs on City projects had been affected by the affirmative action programs that have been in place in one form or another since 1977.

In upholding the Illinois Department of Transportation's Disadvantaged Business Enterprise Program for federally-assisted transportation contracts, the trial court specifically pointed to economy-wide and no-goals contracts as evidence that the government maintained its compelling interest in using race-based remedies.

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 that IDOT's 2005 DBE goal represents a "plausible lower-bound estimate" of DBE participation in the absence of discrimination.... Plaintiff presented no persuasive evidence contravening the conclusions of IDOT's studies, or explaining the disparate usage of DBEs on goals and non-goals contracts.... IDOT's proffered evidence of discrimination against DBEs was not limited to alleged discrimination by prime contractors in the award of subcontracts. IDOT also presented evidence that discrimination in the bonding, insurance, and financing markets erected barriers to DBE formation and prosperity. Such discrimination inhibits the ability of DBEs to bid on prime contracts, thus allowing the discrimination to indirectly seep into the award of prime contracts, which are otherwise awarded on a race- and gender-neutral basis. This indirect

⁶⁵ *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.").

discrimination is sufficient to establish a compelling governmental interest in a DBE program.... Having established the existence of such discrimination, a governmental entity has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.⁶⁶

4. Examine Anecdotal Evidence of Race- and Gender-Based Barriers

In addition to quantitative data, 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.”⁶⁷ Evidence about discriminatory practices engaged in by prime contractors, bonding companies, suppliers, lenders 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.⁶⁸ 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.”⁶⁹ “[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.”⁷⁰

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.”⁷¹ 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

⁶⁶ *Northern Contracting II*, at *82 (internal citations omitted); see *Croson*, 488 U.S. at 492.

⁶⁷ *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

⁶⁸ *Adarand VII*, 228 F.3d at 1168-1172.

⁶⁹ *Concrete Works II*, 36 F.3d at 1520, 1530.

⁷⁰ *Engineering Contractors II*, 122 F.3d at 926.

⁷¹ *Id.* at 249.

described by Denver’s witnesses or to relate their own perceptions on discrimination in the Denver construction industry.”⁷²

F. Narrowly Tailoring a Minority- and Women-Owned Business Enterprise Program for PHHS

Even if PHHS has a strong basis in evidence to believe that race-based measures are needed to remedy identified discrimination, the program must also be narrowly tailored to that evidence. The courts have repeatedly examined the following factors in determining whether race-based remedies are narrowly tailored to achieve their purpose:

1. The efficacy of race-neutral remedies at overcoming identified discrimination;
2. The relationship of numerical benchmarks for government spending to the availability of minority- and women-owned firms and to subcontracting goal setting procedures;
3. The flexibility of the program requirements, including the provision for good faith efforts to meet goals and contract specific goal setting procedures;
4. The congruence between the remedies adopted and the beneficiaries of those remedies;
5. Any adverse impact of the relief on third parties; and
6. The duration of the program.⁷³

It is imperative that remedies not operate as fixed quotas.⁷⁴ Programs that lack waivers for firms that fail to meet the subcontracting goals but make good faith efforts to do so have been struck down.⁷⁵ In *Croson*, the Court refers approvingly to the contract-by-contract waivers used in the USDOT’s DBE program.⁷⁶ This

⁷² *Concrete Works IV*, 321 F.3d at 989.

⁷³ *United States v. Paradise*, 480 U.S. 149, 171 (1987); *see also Sherbrooke*, 345 F.3d at 971-972.

⁷⁴ *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”).

⁷⁵ *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.”).

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

feature has been central to the holding that the DBE program meets the narrow tailoring requirement.⁷⁷

A recent decision upholding the Illinois Tollway's M/W/DBE program strongly suggests that a local agency model its program after the USDOT DBE program regulations as much as possible.

[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] Although the Tollway is not beholden to the Federal Regulations, those policy reasons are no different here.... [W]here 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.... The Tollway's race-neutral measures are consistent with those suggested under the Federal Regulations. See, 49 U.S.C. § 26.51. The Court finds that the availability of these programs, which mirror IDOT's, demonstrate 'serious, good faith consideration of workable race-neutral alternatives.' [citations omitted] In terms of flexibility, the Tollway Program, like the Federal Program, provides for waivers where prime contractors are unable to meet DBE participation goals, but have made good faith efforts to do so.... Because the Tollway demonstrated that waivers are available, routinely granted, and awarded or denied based on guidance found in the Federal Regulations, the Court finds the Tollway Program sufficiently flexible. Midwest's final challenge to the Tollway Program is that its goal-setting process is "secretive and impossible to scrutinize." [reference omitted] However, the Tollway has plainly laid out the two goal-setting procedures it has employed since the program's enactment.... The Tollway Defendants have provided a strong basis in evidence for their DBE Program. Midwest, by contrast, has not come forward with any concrete, affirmative evidence to shake this foundation.⁷⁸

1. Consider Race- and Gender-Neutral Remedies

Race- and gender-neutral approaches are a necessary component of a defensible and effective M/WBE program⁷⁹ and the failure to seriously consider

⁷⁷ See, e.g., *Sherbrooke*, 345 F.3d at 972.

⁷⁸ *Midwest Fence*, at *22-*23.

⁷⁹ *Croson*, 488 U.S. at 507 (Richmond considered no alternatives to race-based quota); *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

such remedies has been fatal to several programs.⁸⁰ 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 Parkland without resorting to the use of race or gender in its decision-making. Effective remedies include unbundling of contracts into smaller units, providing technical support, and developing programs to address issues of financing, bonding, and insurance important to all small and emerging businesses.⁸¹ Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.⁸²

The requirement that an agency must meet the maximum feasible portion of the goal through race-neutral measures as well as estimate that portion of the goal it predicts will be met through such measures has been central to the holdings that the DBE regulations meet narrow tailoring.⁸³

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.⁸⁴ 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.”⁸⁵

2. Set Targeted Goals

Numerical goals or benchmarks for M/WBE participation must be substantially related to their availability in the relevant market.⁸⁶ For example, the DBE regulations require 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.⁸⁷ Goal setting, however, is not an

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).

⁸⁰ *See, e.g., Florida A.G.C. Council, Inc. v. State of Florida*, Case No.: 4:03-CV-59-SPM at 10 (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.

⁸¹ *See* 49 CFR § 26.51.0.

⁸² *Crososon*, 488 U.S. at 503 n.3; *Webster*, 51 F.Supp.2d at 1380.

⁸³ *See, e.g., Sherbrooke*, 345 F.3d. at 973

⁸⁴ *Grutter*, 529 U.S. at 339.

⁸⁵ *Coral Construction*, 941 F.2d at 923.

⁸⁶ *Webster*, 51 F.Supp.2d at 1379, 1381 (statistically insignificant disparities are insufficient to support an unexplained goal of 35 percent M/WBE participation in County contracts); *see also Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, et al.*, 83 F.Supp.2d 613, 621 (D. Md. 2000).

⁸⁷ 49 C.F.R. § 26.45.

absolute science.⁸⁸ “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*.”⁸⁹

It is settled case law that goals for a particular solicitation should reflect the particulars of the contract, not reiterate annual aggregate targets. Contract specific goals must be based upon availability of D/M/WBEs to perform the anticipated scopes— including the work estimated to be performed by the prime firm— of the individual contract. Not only is contract goal setting legally mandated,⁹⁰ 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 unrealistic contract goals. While more labor intensive than defaulting to the annual, overall goals, there is no option to eschew narrowly tailoring program implementation because to do so would be more burdensome.

3. Ensure Flexibility of Goals and Requirements

It is imperative that remedies not operate as fixed quotas.⁹¹ A M/WBE program must provide for contract awards to firms who fail to meet the contract goals but make good faith efforts to do so.⁹² Further, firms that meet the goals cannot be favored over those who made good faith efforts. In *Croson*, the Court refers approvingly to the contract-by-contract waivers used in the USDOT’s DBE program.⁹³ This feature has been central to the holding that the DBE program meets the narrow tailoring requirement.⁹⁴

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

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

⁸⁸ In upholding New Jersey Transit’s DBE program, the court held that “Plaintiffs have failed to provide evidence of another, more perfect, method” of goal setting. *GEOD Corp. v. New Jersey Transit Corp.*, 2009 U.S. Dist. LEXIS 74120, at *20 (D. N.J. 2009).

⁸⁹ *Sherbrooke*, 345 F.3d. at 972.

⁹⁰ *See id*; *Coral Construction*, 941 F.2d at 924.

⁹¹ *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”).

⁹² *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.”).

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

⁹⁴ *See, e.g., Sherbrooke*, 345 F.3d. at 972.

First, the groups eligible to benefit from the remedies must be based upon the evidence.⁹⁵ 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.”⁹⁶ In striking down Cook County’s program, the Seventh Circuit Court of Appeals 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.”⁹⁷ 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.⁹⁸ Therefore, remedies should be limited to those firms that have suffered actual harm in the market area.⁹⁹

The policy question of the level of specificity at which to define beneficiaries must be addressed. Approaches range from a single M/WBE or DBE goal that includes all racial and ethnic minorities and nonminority women,¹⁰⁰ to separate goals for each minority group and women.¹⁰¹ It should be noted, however, that the State of Ohio’s Program was specifically faulted for lumping together all “minorities,” with the court questioning the legitimacy of forcing African American contractors to share relief with recent Asian immigrants.¹⁰²

Second, the DBE Program’s limitation to persons who are socially and economical disadvantaged, as opposed to membership in a group standing alone, has been key to its constitutionality. The 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 must meet the Small Business Administration’s size definitions for its industry, have been central to the courts’ holdings that Part 26 is narrowly tailored.¹⁰³ “[W]ealthy

⁹⁵ *Philadelphia II*, 6 F.3d at 1007-1008 (strict scrutiny requires data for each minority group; data was insufficient to include Hispanics, Asians or Pacific Islanders or Native Americans).

⁹⁶ *Webster*, 51 F.Supp.2d at 1380–1381.

⁹⁷ *Builders Association of Greater Chicago v. County of Cook*, 256 F.3d 642, 646 (7th Cir. 2001).

⁹⁸ *Concrete Works IV*, 321 F.3d at 971 (Denver introduced evidence of bias against each group; that is sufficient).

⁹⁹ *Rowe II*, 615 F.3d at 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.”).

¹⁰⁰ See 49 C.F.R. § 26.45(h) (overall goal must not be subdivided into group-specific goals).

¹⁰¹ See *Engineering Contractors II*, 122 F.3d at 900 (separate goals for Blacks, Hispanics and women).

¹⁰² *Associated General Contractors of Ohio v. Drabik*, 214 F.3d 730, 737 (6th Cir. 2000) (“*Drabik II*”); see also *Western States*, 407 F.3d at 998 (“We have previously expressed similar concerns about the haphazard inclusion of minority groups in affirmative action programs ostensibly designed to remedy the effects of discrimination.”).

¹⁰³ *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 v. City of New Haven*, 791 F.Supp. 941, 948 (D. Conn. 1992), vacated on other

minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptively [socially] disadvantaged but can demonstrate actual social and economic disadvantage. Thus, race is made relevant in the program, but it is not a determinative factor.”¹⁰⁴ Further, anyone can challenge the disadvantaged status of any firm.¹⁰⁵

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.¹⁰⁶ The burden of compliance need not be placed only upon those firms directly responsible for the discrimination. “Innocent” parties can be made to share some of the burden of the remedy for eradicating racial discrimination.¹⁰⁷ The proper focus is whether the burden on third parties is “too intrusive” or “unacceptable.”

Burdens must be proven, and cannot constitute mere speculation by a plaintiff.¹⁰⁸ “Implementation of the race-conscious contracting goals for which TEA-21 provides will inevitably result in bids submitted by non-DBE firms being rejected in favor of higher bids from DBEs. Although this places a very real burden on non-DBE firms, this fact alone does not invalidate TEA-21. If it did, all affirmative action programs would be unconstitutional because of the burden upon non-minorities.”¹⁰⁹

Narrow tailoring permits certified firms acting as prime contractors to count their self-performance towards meeting contract goals. There is no requirement that a program be limited only to the subcontracting portions of contracts, and numerous decisions and studies have found that discrimination operates against D/M/WBE prime vendors. For example, the trial court in upholding the Illinois DOT’s DBE program explicitly recognized that barriers to subcontracting

grounds, 41 F.3d 62 (2nd Cir. 1992) (definition of “disadvantage” was vague and unrelated to goal).

¹⁰⁴ *Id.* at 973.

¹⁰⁵ 49 C.F.R. §26.87.

¹⁰⁶ See *Engineering Contractors Assoc. of South Florida, Inc. v. Metropolitan Dade County* (“*Engineering Contractors I*”), 943 F.Supp. 1546, 1581-1582 (S.D. Fla. 1996) (County chose not to change its procurement system).

¹⁰⁷ *Concrete Works IV*, 321 F.3d at 973; *Wygant*, 476 U.S. at 280-281; *Adarand VII*, 228 F.3d 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 it [sic] has suffered anything more than minimal revenue losses due to the program.”).

¹⁰⁸ See, e.g., *Rowe II*, 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).

¹⁰⁹ *Western States*, 407 F.3d at 995.

opportunities affect the ability of DBEs also 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.¹¹⁰

The DBE program regulations recognize these facts and therefore provide remedial benefits not only to firms acting as subcontractors on a project,¹¹¹ but also to DBEs seeking prime work.¹¹² Moreover, utilization of D/M/WBEs as prime firms reduces the need to set contract goals, thereby meeting the test that the agency must use race-neutral measures to the maximum feasible extent.

6. Regularly Review the Program

Race-based programs must have duration limits. A race-based remedy must “not last longer than the discriminatory effects it is designed to eliminate.”¹¹³ The unlimited duration and lack of review were factors in the court’s holding that the City of Chicago’s M/WBE 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 1994.¹¹⁴ How old is too old is not definitively answered,¹¹⁵ but governments would be wise to analyze data at least once every five or six years.

¹¹⁰ *Northern Contracting II*, 2005 U.S. Dist. LEXIS 19868 at 74.

¹¹¹ 49 C.F.R. § 26.45(a)(1).

¹¹² 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.”).

¹¹³ *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 238 (1995) (“*Adarand III*”).

¹¹⁴ *BAGC v. Chicago*, 298 F.Supp.2d at 739.

¹¹⁵ 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

In contrast, the USDOT DBE Program’s periodic review by Congress has been repeatedly held to provide adequate durational limits.¹¹⁶ 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 5 years.”¹¹⁷

The legal test is the most recent available data.¹¹⁸ How old is too old is not definitively answered, but PHHS would be wise to analyze data at least once every five or six years.

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, 1 F.3d at 409 (14 year-old evidence of discrimination was “too remote to support a compelling governmental interest.”).

¹¹⁶ See *Western States*, 407 F.3d at 995.

¹¹⁷ *Rowe*, 615 F.3d at 253.

¹¹⁸ *Rothe Development Corporation v. U.S. Department of Defense*, 545 F.3d 1023, 1038-1039 (Fed. Cir. 2008) (“*Rothe VII*”).

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III. PHHS' MINORITY- AND WOMEN-OWNED CONTRACTING POLICIES AND PROCEDURES

This Chapter describes PHHS' program for Minority- and Women-Owned Business Enterprises ("M/WBE program") and related procurement policies and procedures. This review focuses on the implementation of the race- and gender-conscious program and race- and gender-neutral policies that impact the ability of firms to access Parkland's contracts and associated subcontracts on a fair and equitable basis. As discussed in Chapter II, a narrowly tailored program should use race- and gender-neutral measures to the maximum feasible extent, and race- and gender-conscious remedies must be targeted, flexible, realistic and time limited. To meet this standard, we reviewed PHHS' current efforts and interviewed business owners and agency staff about the program.

A. PHHS' M/WBE Program

The M/WBE program is contained in the Purchasing Manual, at section 6-202.19. Under the program, contractors are required to demonstrate to PHHS' satisfaction that it seek out, identify, and assist W/MBEs to become subcontractors and suppliers. In addition, contractors are prohibited from discriminating on the basis of race, sex, and other forbidden grounds. Violation of this clause can result in the termination of a contract for default. Other sections of the Manual require the inclusion of this clause in various kinds of procurements.

PHHS has been implementing goals since 1999. Currently, Parkland applies a 25 percent goal for goods and services contracts and a 30 percent goal for construction. In some circumstances, the vendor is permitted to propose its own goal based on its determination of subcontracting opportunities. PHHS measures achievements based on the availability of subcontracting opportunities. Consequently, contracts without such opportunities (*e.g.*, large capital equipment purchases, drugs) are not included in the base from which the 25 percent goal is calculated. While the construction contracts goal is also said to be based on the availability of contracting opportunities for W/MBEs, there is not a parallel specific exclusion of some kinds of work from the base for this goal.

If the prime contractor obtains W/MBE participation, it must submit a detailed form concerning the W/MBE's certification status, work to be performed, and dollar amount of participation. A contractor relying on good faith efforts to meet its obligations must submit a good faith efforts form that asks whether it solicited formal quotes or bids from W/MBEs at least 10 calendar days before the bid/proposal due date and whether it provided plans or specifications to W/MBEs in order to assist W/MBEs; a bidder may also mention other solicitation methods it may have used. The contractor must also list W/MBE quotes that were

rejected, and why. These supplier diversity plans are required but not scored for firms that propose to self-perform the work; it is a pass/fail system. Plans can be amended after bid submission

To monitor compliance with its program, Parkland requires contractors to submit a post-award participation plan, including documentation of how W/MBEs will be identified if opportunities arise after contract award. Examples of ways of contacting W/MBEs include print advertisements, use of local chambers of commerce, and on-line media. The contractor must also describe the efforts it will make to ensure that W/MBEs have an equitable opportunity to compete for subcontracts after contract award. The contractor must also commit to follow this plan, participate in any surveys that Parkland requires, and submit periodic to PHHS concerning its compliance.

Administratively, the Vice-President for Strategic Sourcing is responsible for the goods and services portion of the program, while the Senior Vice-President for Facilities Development has a similar role in the construction side of the program. The Director for Supplier Diversity has a “dotted line” to the organization’s Chief Financial Officer. The District does not conduct its own W/MBE certification, but rather relies on the determination of eligibility of other certifying agencies (*e.g.*, the DFW Minority Business Development Council) for this function.

Parkland implements several race- and gender-neutral measures. These include:

- Contacting one, two or three M/MBEs, depending on the dollar threshold.
- Soliciting firms directly through the supplier portal.
- Generating pre-solicitation notices on a case-by-case basis.
- Participating in outreach events to help inform local W/MBEs about doing business with the agency, including monthly “Let’s Talk Business” sessions where end user departments discuss specific topics, such as how to navigate the procurement process. Assist agencies and chambers of commerce are invited, as are individual firms in the Hospital’s database.

B. Experiences with PHHS’ Contracting Policies and Procedures

To explore the impacts of race- and gender-neutral contracting policies and procedures and the implementation of Parkland’s M/WBE program, we interviewed 62 individuals about their experiences and solicited their suggestions for changes. We also received written comments. The following are summaries of the topics discussed. Quotations are indented, and have been edited for

readability. They are representative of the views expressed during four sessions by participants and one public meeting.

1. Payments

Prime vendors by in large did not experience payment problems or delays.

No [problems].

I didn't [have problems getting paid].

We don't have problem with payment.

However, small firms experienced cash flow problems that the general contractor must address to keep the project moving.

We have a pay on paid but the minority owned firms, if we can understand their situation we will pay. The only frustrating part is they come in on Friday and need a check that day. So if you have the information ahead of time you can work with them.

One solution was to permit prime firms to invoice Parkland every two weeks instead of monthly.

[It would help to invoice] every two weeks.

The [D/FW] Airport does have a program where ... they will pay us [prime contractors] to pay [M/WBEs] early

Many construction participants urged Parkland to release contract retainage upon completion of that portion of the project, rather than continue the policy of retaining 5 to 10 percent of the contract value until the project is fully closed out.

A major, major, obstacle for small businesses [is] release of their final retainage. And I'm telling you that a lot of our profit is in our retainage because our contracts are typically pretty small. We get in there, we get out, we're done in three weeks. But we have to wait a year and a half until the project is finish before the prime releases our retainage.

One of the things that the County and Parkland and the agency do can to help out [is] ... look at the retainage.

2. Access to Information and Firm Outreach

Most participants were able to access information on upcoming opportunities.

We have no problem as a minority getting in [to see decision makers at Parkland].

However, some M/WBEs had not been successful in receiving answers to their attempts to penetrate the process..

We've worked every key decision maker in Parkland and you can't get any answers.

[Parkland is] not very communicative. They don't give debriefs. You don't know where you stand on things. They're not very open door policy ... probably because they're so busy. So, I just think the overall approach and communication the MWBE community is lacking.

Training and access to information on how to do business with the Hospital was mentioned by some M/WBEs as a means to increase their participation.

[A local agency has] started a how to do business program with them ... showing us this is exactly, these are the steps you need to take to be able to do business with us. And it was presented in layman's terms.

3. Access to Prime Contracts

It was especially difficult for M/WBEs and small firms to successfully bid on prime contracts. Several factors contribute to this situation.

Large packages made it impossible for small firms to participate as prime vendors.

The packages that Parkland puts out, they're huge. A small business can't go after that project.

For example, the requirement for surety bonds at levels beyond what small firms can obtain keeps many M/WBEs from serving as prime vendors.

The bonding [requirement] ... really needs to be looked at for the small contractors.... Is it actually necessary for that particular contract?

High levels of insurance were another barrier. Some owners thought the risk management function did not assess risks on a case-by-case basis, but rather applied limits by rote.

Risk management sometimes gets overzealous.

Short lead times on solicitations make it difficult for smaller firms to respond.

Putting out a bid or proposal a week before it's due [supports incumbents]. Now [the agency staff has] already called somebody

that you know you want to have the contract, they already know and they've been working on theirs for two or three months.

Some participants suggested supplier diversity should be involved directly the selection process to ensure fairness and equal application of standards.

Change the selection process [to include staff from the supplier diversity office].

Debriefings for unsuccessful firms were one method to increase their capabilities for future work.

Communicate with the people who are successful or unsuccessful probably more so, to tell them what exactly happened, why they were not successful.

M/WBEs and non-M/WBEs broadly supported adoption of a small business setaside program.

[Informally procured contracts] should be [set aside] for smaller businesses.

4. Meeting M/WBE Contract Goals

Most prime contractors and consultants reported that they were able to meet the goals.

[Large general contractors] want to meet the goals because we use that as our marketing for future projects.

There was strong consensus that Parkland should set goals on a contract-by-contract basis rather than generally applying the same goals regardless of the scopes of work of the project.

[Set goals] contract by contract.

The inability to count second tier and lower subcontracting dollars creates issues for general contractors and reduces opportunities for M/WBEs.

The opportunities for inclusion for the emerging businesses is in the second tier [of subcontracting].

We need our large [first tier subcontractor] to help in the [M/WBE] training process.

Most of [the M/WBEs] they do little things. You're getting the numbers where you can get them.

While most prime vendors were aware that it is possible to seek a reduction in the goal by demonstrating their good faith efforts to meet the goal, the perception was that it is burdensome and difficult to establish good faith efforts.

I always have this problem with good faith effort.... You got to be really careful and make sure everything is dotted.... Can that hurt us somewhere down the road when we go after another project with this agency or that same type of project?

Supportive services such as bonding programs, quick pay, etc., were recommended by general contractors as support for their meeting contract goals.

[A] training process and bonding [capability] got to be [deal with] early on. [An agency] actually had the insurance and bonding done with firms upfront so when we needed firms we just had to call and say, we need firms who can do drywall.... They had a list of them as opposed to come bid day and we need firms that can do the work and then we got to work with them to hustle and try to get bonding for them. They were able to get them, I hate to use the word prequalified, but basically ready prior to working and coming out. So that was something an agency did that helped us, and to not only meet but vastly increase MWBE.... The agencies could do that before they even select one of us [general contractors] as a firm.

[D/FW Airport] also have a program where they will pay for contractors to supply a bond. Even if they don't need to get a bond. Because [if] they supply a bond they get capacity for bonding. And now they have three projects that they've bonded and they've been successful on so the bonding company is more, you know, more willing to do bonding to that company in the future. But the [agency] has to understand they have to pay for it.

5. Contract Performance Monitoring and Enforcement

By in large, M/WBEs, non-M/WBEs and PHHS staff reported that there is little monitoring of actual usage of M/WBEs on the agency's contracts.

Someone has to be accountable.

The [Dallas/Fort Worth International] Airport has [robust compliance monitoring] and we would love for the County and everybody else to get to that point.

[Agency compliance staff] can go out to the events. They can shake hands, they can hand out their business card. But there is no more than that.

General contractors echoed the request for contract compliance monitoring.

There's nobody to monitor it and mediate [between prime contractors and subcontractors].

An electronic system like that used by Dallas/Fort Worth International Airport to monitor participation and notify subcontractors of payments to the prime contractor was suggested by M/WBEs and non-M/WBEs as one way to increase M/WBEs' abilities to manage their work and their cash flow.

If there's a prime contract and part of that contract it says a percentage of that is to be used for a woman-owned or minority and they solicit us, we give them the information, we're the sub on that. But we get no activity. They need to have a reporting thing like D/FW airport. I love it when ... every month or every quarter I have to document, when they send the report, prove that they paid me X amount of dollars or whatever.

D/FW Airport is a dynamic program. It's working.

There needs to be a system in place that the documentation is there that the small business are getting paid.... [The agency should require] something back to verify that those MWBEs that you listed, that they are actually getting paid and getting paid the amount that you stated in the [sub]contract.

The M/WBE function needs to be elevated within PHHS' structure, according to several interviewees.

Increase the level of person who's in charge of [the M/WBE program]. Make them a more senior management.

The differences [in opportunities at the County and Parkland and those available at] DART and at the airport [is that] the buyer's performances and so on are measured by the results that they have accomplished in terms of actual minority business.

An enhancement would be a system to notify subcontractors that were listed by a successful prime contractor would help to enforce goals and facilitate their ability to plan their work

C. Conclusion

The program review and the business owner and stakeholder interviews suggest several enhancements to make PHHS Program more effective. These include releasing retainage upon task completion and paying for materials in full when received; implementing an electronic data collection, monitoring and notification system; increased outreach to M/WBEs; reviewing bonding, insurance and experience requirements; lengthening solicitation times; including the M/WBE Office in the evaluation process; adopting a small business setaside program; setting goals on a contract-by contract basis; counting second and lower tier M/WBE participation towards the contract goals; ensuring the waiver process is well disseminated and understood; working with other agencies to provide

technical assistance, bonding and supportive services to M/WBEs; and monitoring of compliance during contract performance.

IV. UTILIZATION, AVAILABILITY AND DISPARITY ANALYSIS FOR PHHS

A. Contract Data Sources and Sampling Method

We analyzed purchase order and contract data for calendar years 2011 through 2013. The Final File for analysis contained 99 prime contracts and associated subcontracts, with a total award amount of \$408,084,338. This represents 85% of all dollars in the data.

This Final File was used to determine the geographic market area for the Study; to estimate the utilization of M/WBEs on those contracts; and to calculate M/WBE availability in PHHS' marketplace.

B. Overview of Quantitative Analysis

A key component of a defensible disparity study is a highly detailed quantitative analysis of the contracts let by the agency. The goal of this analysis is to explore for any disparities between Parkland's use of non-white male firms and the availability of these firms. This is the type of "strong evidence" required by the courts.

Below are the steps undertaken for the quantitative analysis:

1. We examined Parkland's purchase order and contract data to produce a database of prime contracts and associated subcontracts. This database is the Final File.
2. We analyzed the Final File to determine PHHS' product market area, *i.e.*, what products and services are purchased by the agency. This analysis yielded the "unconstrained product market".
3. We determined the states and counties where the firms that received contracts are located in order to determine Parkland's geographic market area.
4. We limited the unconstrained product market by the geographic market. This produced the "constrained product market."
5. We examined the constrained product market to determine how the contracts are distributed to M/WBEs, *i.e.*, Parkland's utilization of M/WBEs. In addition, this step produced data on how Parkland's spending is distributed across industry sectors. These data—the share of total contract spending contained by each sector—provide the sector weight of total spending, and these weights were used in step 7.
6. We combined data from Hoovers business directory with a master directory of M/WBEs to produce estimates of M/WBE availability in Parkland's geographic and constrained product markets.

7. We adjusted availability by the weights derived from the analysis of Parkland’s utilization to produce the study’s weighted M/WBE availability.
8. We derived disparity ratios for each demographic group based on PHHS’ weighted utilization and weighted availability of M/WBEs.

C. PHHS’ Product and Geographic Markets

1. PHHS’ Product Market

A defensible disparity study must determine empirically the industries that comprise the agency’s product or industry market. The accepted approach is to analyze those detailed industries, as defined by 6-digit North American Industry, Classification System (“NAICS”) codes,¹¹⁹ that make up at least 75 percent of the prime contract and subcontract payments for the Study period.¹²⁰ However, for this Study, we went further, and applied a “90/90/90” rule, whereby we analyzed NAICS codes that cover over 90 percent of the total contract dollars; over 90 percent of the prime contract dollars; and over 90 percent of the subcontract dollars. We took this approach so that we could be assured that we provide an in depth picture of Parkland’s activities.

Tables 1 through 3 present the NAICS codes used to define the product market when examining contracts disaggregated by level of contract (*i.e.*, was the firm receiving the contract a prime vendor or a subcontractor); the label for each NAICS code; and the industry percentage distribution of the number of contracts and spending across NAICS codes and funding source. The results in Tables 1 through 3 present PHHS’ *unconstrained* product market, which will be later constrained by the geographic market area, discussed below.

Table 1: Industry Percentage Distribution of All Contracts by Dollars Paid, All Sectors

NAICS	NAICS Code Description	PCT Total Contract Dollars	Cumulative PCT Total Contract Dollars
524113	Direct Life Insurance Carriers	8.75%	8.75%
238220	Plumbing, Heating, and Air-Conditioning Contractors	6.40%	15.16%
423690	Other Electronic Parts and Equipment Merchant	5.77%	20.93%

¹¹⁹ www.census.gov/eos/www/naics.

¹²⁰ “Guidelines for Conducting a Disparity and Availability Study for the Federal DBE Program,” Transportation Research Board of the National Academy of Sciences, NCHRP Report, Issue No. 644, 2010, pp. 50-51 (“National Disparity Study Guidelines”).

NAICS	NAICS Code Description	PCT Total Contract Dollars	Cumulative PCT Total Contract Dollars
	Wholesalers		
561720	Janitorial Services	5.73%	26.65%
238210	Electrical Contractors and Other Wiring Installation Contractors	5.57%	32.23%
561110	Office Administrative Services	5.24%	37.46%
561440	Collection Agencies	4.74%	42.20%
541611	Administrative Management and General Management Consulting Services	4.70%	46.90%
541310	Architectural Services	4.23%	51.13%
621610	Home Health Care Services	3.59%	54.72%
541618	Other Management Consulting Services	3.36%	58.08%
541511	Custom Computer Programming Services	2.80%	60.88%
325413	In-Vitro Diagnostic Substance Manufacturing	2.75%	63.63%
238310	Drywall and Insulation Contractors	2.36%	65.99%
237310	Highway, Street, and Bridge Construction	2.24%	68.23%
333316	Photographic and Photocopying Equipment Manufacturing	2.24%	70.47%
236220	Commercial and Institutional Building Construction	2.13%	72.60%
541219	Other Accounting Services	1.88%	74.48%
238290	Other Building Equipment Contractors	1.84%	76.32%
561320	Temporary Help Services	1.83%	78.15%
524298	All Other Insurance Related Activities	1.78%	79.93%
541810	Advertising Agencies	1.61%	81.54%
541330	Engineering Services	1.51%	83.05%
532291	Home Health Equipment Rental	1.42%	84.47%
541211	Offices of Certified Public Accountants	1.29%	85.77%
621112	Offices of Physicians, Mental Health Specialists	1.28%	87.05%
561499	All Other Business Support Services	1.15%	88.20%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	1.04%	89.24%
561621	Security Systems Services (except Locksmiths)	0.87%	90.11%
TOTAL			100.00%

Source: CHA analysis of PHHS data.

Table 2: Industry Percentage Distribution of Prime Contracts by Dollars Paid, All Sectors

NAICS	NAICS Code Description	PCT Total Contract Dollars	Cumulative PCT Total Contract Dollars
524113	Direct Life Insurance Carriers	12.33%	12.33%
561720	Janitorial Services	8.05%	20.38%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	7.99%	28.37%
561110	Office Administrative Services	7.37%	35.74%
561440	Collection Agencies	6.67%	42.42%
541611	Administrative Management and General Management Consulting Services	6.62%	49.04%
621610	Home Health Care Services	5.02%	54.06%
541618	Other Management Consulting Services	4.70%	58.76%
541511	Custom Computer Programming Services	3.95%	62.71%
541310	Architectural Services	3.94%	66.65%
325413	In-Vitro Diagnostic Substance Manufacturing	3.87%	70.52%
333316	Photographic and Photocopying Equipment Manufacturing	3.15%	73.68%
236220	Commercial and Institutional Building Construction	2.80%	76.48%
541219	Other Accounting Services	2.64%	79.12%
524298	All Other Insurance Related Activities	2.51%	81.63%
561320	Temporary Help Services	2.47%	84.10%
541810	Advertising Agencies	2.26%	86.36%
532291	Home Health Equipment Rental	2.00%	88.36%
621112	Offices of Physicians, Mental Health Specialists	1.81%	90.17%
TOTAL			100.00%

Source: CHA analysis of PHHS data

Table 3: Industry Percentage Distribution of Subcontracts by Dollars Paid, All Sectors

NAICS	NAICS Code Description	PCT Total Contract Dollars	Cumulative PCT Total Contract Dollars
238210	Electrical Contractors and Other Wiring Installation Contractors	19.23%	19.23%
238220	Plumbing, Heating, and Air-Conditioning Contractors	17.91%	37.15%
238310	Drywall and Insulation Contractors	8.13%	45.28%
237310	Highway, Street, and Bridge Construction	7.73%	53.01%
541330	Engineering Services	5.07%	58.08%
541310	Architectural Services	4.93%	63.01%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	3.59%	66.60%
238140	Masonry Contractors	2.61%	69.21%
238120	Structural Steel and Precast Concrete Contractors	2.43%	71.64%
561990	All Other Support Services	2.33%	73.97%
238290	Other Building Equipment Contractors	2.17%	76.14%
238150	Glass and Glazing Contractors	2.14%	78.28%
238160	Roofing Contractors	2.08%	80.36%
238910	Site Preparation Contractors	1.75%	82.11%
236118	Residential Remodelers	1.60%	83.71%
238320	Painting and Wall Covering Contractors	1.26%	84.97%
541990	All Other Professional, Scientific, and Technical Services	1.24%	86.21%
561621	Security Systems Services (except Locksmiths)	1.21%	87.42%
444110	Home Centers	1.17%	88.59%
423220	Home Furnishing Merchant Wholesalers	0.90%	89.48%
237110	Water and Sewer Line and Related Structures Construction	0.80%	90.29%
TOTAL			100.0%

Source: CHA analysis of PHHS data.

2. PHHS' Geographic Market

The courts require that a local government limit the reach of its race- and gender-conscious contracting program for contracts it funds to its market area.¹²¹ While it may be that PHHS' jurisdictional boundaries comprise its market area, this element of the analysis must be empirically established.¹²²

To determine the relevant geographic market area, we applied the rule of thumb of identifying the firm locations that account for at least 75 percent of contract and subcontract dollar payments in the contract data file.¹²³ Location was determined by ZIP code as listed in the file and aggregated into counties as the geographic unit.

As presented in Table 4, spending in Texas accounted for 75.66 percent of all contract dollars paid in Parkland unconstrained product market. Of that total, the counties of Dallas, Tarrant, Collin and Denton accounted for 81.28 percent. Therefore, these four counties constituted the geographic market area from which we drew our availability data. Table 5 presents data on how the contract dollars were spent across Texas counties.

Table 4: Distribution of Contracts in PHHS' Product Market, by State

State	PCT of Total Contract Dollars Paid		State	PCT of Total Contract Dollars Paid
TX	75.66%		IN	2.93%
VA	4.00%		KY	2.33%
NC	3.98%		CA	0.70%
IL	3.78%		MO	0.10%
FL	3.19%		CO	0.10%
MI	3.18%			
			TOTAL	100.00%*

* Four states each received agency spending totaling less than 0.01% of all agency spending
Source: CHA analysis of PHHS data.

¹²¹ *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).

¹²² *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").

¹²³ National Disparity Study Guidelines, p. 49.

Table 5: Distribution of Contracts in PHHS' Product Market within Texas, by County

County	PCT of Total Contract Dollars Paid
Dallas	57.13%
Tarrant	13.08%
Denton	8.49%
Collin	2.58%
TOTAL	81.28%

Source: CHA analysis of PHHS data.

D. PHHS' Utilization of M/WBEs in Its Market Areas

The next essential step was to determine the dollar value of Parkland's utilization of M/WBEs in its geographic and constrained product market areas, as measured by payments to prime firms and subcontractors and disaggregated by race and gender. Because the agency was unable to provide us with full records for payments to prime contractors and subcontractors other than firms certified as M/WBEs, we contacted the prime vendors to request that they describe in detail their contract and subcontracts, including race, gender and dollar amount paid to date. We used the results of this extensive contract data collection process to assign minority or female status to the ownership of each firm in the contract data file.

Table 6 presents data on the total contract dollars paid by PHHS for each NAICS code and the share the contract dollars comprise of all industries.

Table 6: NAICS Code Distribution of Contract Dollars, All Sectors

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
524113	Direct Life Insurance Carriers	\$12,463,364	9.12%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$9,114,158	6.67%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$8,215,368	6.01%
561720	Janitorial Services	\$8,151,916	5.96%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$7,937,466	5.81%
561110	Office Administrative Services	\$7,454,973	5.45%
561440	Collection Agencies	\$6,746,801	4.93%
541611	Administrative Management and General Management Consulting Services	\$6,697,641	4.90%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
541310	Architectural Services	\$6,022,168	4.40%
621610	Home Health Care Services	\$5,111,550	3.74%
541618	Other Management Consulting Services	\$4,776,966	3.49%
541511	Custom Computer Programming Services	\$3,993,400	2.92%
325413	In-Vitro Diagnostic Substance Manufacturing	\$3,914,362	2.86%
238310	Drywall and Insulation Contractors	\$3,356,769	2.46%
237310	Highway, Street, and Bridge Construction	\$3,190,204	2.33%
333316	Photographic and Photocopying Equipment Manufacturing	\$3,188,151	2.33%
236220	Commercial and Institutional Building Construction	\$3,034,600	2.22%
541219	Other Accounting Services	\$2,670,871	1.95%
238290	Other Building Equipment Contractors	\$2,616,321	1.91%
561320	Temporary Help Services	\$2,609,098	1.91%
524298	All Other Insurance Related Activities	\$2,538,822	1.86%
541810	Advertising Agencies	\$2,285,395	1.67%
541330	Engineering Services	\$2,155,576	1.58%
532291	Home Health Equipment Rental	\$2,022,342	1.48%
541211	Offices of Certified Public Accountants	\$1,842,111	1.35%
621112	Offices of Physicians, Mental Health Specialists	\$1,828,997	1.34%
561499	All Other Business Support Services	\$1,637,255	1.20%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	\$1,479,821	1.08%
561621	Security Systems Services (except Locksmiths)	\$1,244,304	0.91%
238140	Masonry Contractors	\$1,077,875	0.79%
238120	Structural Steel and Precast Concrete Contractors	\$1,003,760	0.73%
561990	All Other Support Services	\$959,731	0.70%
238150	Glass and Glazing Contractors	\$884,671	0.65%
238160	Roofing Contractors	\$856,579	0.63%
238910	Site Preparation Contractors	\$722,155	0.53%
236118	Residential Remodelers	\$660,805	0.48%
541990	All Other Professional, Scientific, and Technical Services	\$547,492	0.40%
238320	Painting and Wall Covering Contractors	\$520,358	0.38%
444110	Home Centers	\$482,074	0.35%
423220	Home Furnishing Merchant Wholesalers	\$369,349	0.27%

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
237110	Water and Sewer Line and Related Structures Construction	\$330,392	0.24%
TOTAL		\$136,716,012	100.00%

Source: CHA analysis of PHHS data.

Tables 7a through 7d present the paid contract dollars (total dollars and share of total dollars) by NAICS codes for all industries, this time disaggregated by race and gender.

Table 7a: Distribution of Contract Dollars by Race and Gender, All Sectors (total dollars)

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/WBE
236118	\$0	\$0	\$0	\$0	\$0	\$660,805
236220	\$0	\$2,045,814	\$0	\$0	\$189,652	\$799,134
237110	\$0	\$0	\$0	\$0	\$0	\$330,392
237310	\$0	\$0	\$0	\$0	\$13,127	\$3,177,077
238120	\$0	\$1,003,760	\$0	\$0	\$0	\$0
238140	\$0	\$9,516	\$0	\$0	\$0	\$1,068,359
238150	\$0	\$0	\$0	\$0	\$759,876	\$124,795
238160	\$0	\$0	\$0	\$0	\$1,044	\$855,535
238210	\$0	\$16,919	\$0	\$0	\$867,560	\$7,052,987
238220	\$0	\$815,220	\$0	\$0	\$0	\$8,298,938
238290	\$0	\$0	\$0	\$0	\$0	\$2,616,321
238310	\$0	\$0	\$11,176	\$0	\$1,980	\$3,343,613
238320	\$0	\$154,730	\$0	\$0	\$218,972	\$146,656
238910	\$0	\$0	\$0	\$0	\$0	\$722,155
325413	\$0	\$0	\$0	\$0	\$0	\$3,914,362
331110	\$0	\$0	\$0	\$0	\$0	\$1,479,821
333316	\$0	\$0	\$0	\$0	\$0	\$3,188,151
423220	\$0	\$0	\$0	\$0	\$98,959	\$270,390
423690	\$0	\$0	\$0	\$132,368	\$0	\$8,083,000
444110	\$0	\$0	\$0	\$0	\$0	\$482,074
524113	\$0	\$0	\$0	\$0	\$0	\$12,463,364
524298	\$0	\$0	\$0	\$0	\$0	\$2,538,822
532291	\$0	\$0	\$0	\$0	\$0	\$2,022,342
541211	\$48,000	\$50,500	\$0	\$0	\$1,743,611	\$0
541219	\$0	\$0	\$553,731	\$0	\$0	\$2,117,140
541310	\$893,889	\$46,808	\$568,406	\$12,978	\$142,000	\$4,358,087
541330	\$0	\$388,961	\$136,840	\$0	\$151,473	\$1,478,303

541511	\$0	\$0	\$3,993,400	\$0	\$0	\$0
541611	\$0	\$0	\$0	\$0	\$4,411,677	\$2,285,964
541618	\$0	\$0	\$757,492	\$0	\$0	\$4,019,475
541810	\$0	\$0	\$0	\$0	\$0	\$2,285,395
541990	\$0	\$0	\$0	\$0	\$547,492	\$0
561110	\$0	\$0	\$0	\$0	\$0	\$7,454,973
561320	\$0	\$113,430	\$0	\$0	\$1,111,898	\$1,383,770
561440	\$0	\$0	\$0	\$0	\$0	\$6,746,801
561499	\$0	\$0	\$0	\$0	\$1,500,000	\$137,255
561621	\$0	\$0	\$0	\$0	\$749,976	\$494,328
561720	\$0	\$5,032	\$17,220	\$0	\$8,732	\$8,120,933
561990	\$0	\$0	\$0	\$0	\$334,075	\$625,656
621112	\$0	\$0	\$0	\$0	\$0	\$1,828,997
621610	\$0	\$0	\$0	\$0	\$0	\$5,111,550
Total	\$941,889	\$4,650,690	\$6,038,265	\$145,346	\$12,852,104	\$112,087,719

Source: CHA analysis of PHHS data.

**Table 7b: Distribution of Contract Dollars by Race and Gender, All Sectors
(share of total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Women	Non-M/WBE
236118	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
236220	0.00%	67.42%	0.00%	0.00%	6.25%	26.33%
237110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
237310	0.00%	0.00%	0.00%	0.00%	0.41%	99.59%
238120	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
238140	0.00%	0.88%	0.00%	0.00%	0.00%	99.12%
238150	0.00%	0.00%	0.00%	0.00%	85.89%	14.11%
238160	0.00%	0.00%	0.00%	0.00%	0.12%	99.88%
238210	0.00%	0.21%	0.00%	0.00%	10.93%	88.86%
238220	0.00%	8.94%	0.00%	0.00%	0.00%	91.06%
238290	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
238310	0.00%	0.00%	0.33%	0.00%	0.06%	99.61%
238320	0.00%	29.74%	0.00%	0.00%	42.08%	28.18%
238910	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
325413	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
331110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
333316	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
423220	0.00%	0.00%	0.00%	0.00%	26.79%	73.21%
423690	0.00%	0.00%	0.00%	1.61%	0.00%	98.39%
444110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
524113	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

524298	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
532291	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
541211	2.61%	2.74%	0.00%	0.00%	94.65%	0.00%
541219	0.00%	0.00%	20.73%	0.00%	0.00%	79.27%
541310	14.84%	0.78%	9.44%	0.22%	2.36%	72.37%
541330	0.00%	18.04%	6.35%	0.00%	7.03%	68.58%
541511	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
541611	0.00%	0.00%	0.00%	0.00%	65.87%	34.13%
541618	0.00%	0.00%	15.86%	0.00%	0.00%	84.14%
541810	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
541990	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
561110	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
561320	0.00%	4.35%	0.00%	0.00%	42.62%	53.04%
561440	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
561499	0.00%	0.00%	0.00%	0.00%	91.62%	8.38%
561621	0.00%	0.00%	0.00%	0.00%	60.27%	39.73%
561720	0.00%	0.06%	0.21%	0.00%	0.11%	99.62%
561990	0.00%	0.00%	0.00%	0.00%	34.81%	65.19%
621112	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
621610	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Total	0.69%	3.40%	4.42%	0.11%	9.40%	81.99%

Source: CHA analysis of PHHS data.

**Table 7c: Distribution of Contract Dollars by Race and Gender, All Sectors
(M/WBE, Non-M/WBE, Total)
(total dollars)**

NAICS	MBE	M/WBE	Non-M/WBE	Total
236118	\$0	\$0	\$660,805	\$660,805
236220	\$2,045,814	\$2,235,466	\$799,134	\$3,034,600
237110	\$0	\$0	\$330,392	\$330,392
237310	\$0	\$13,127	\$3,177,077	\$3,190,204
238120	\$1,003,760	\$1,003,760	\$0	\$1,003,760
238140	\$9,516	\$9,516	\$1,068,359	\$1,077,875
238150	\$0	\$759,876	\$124,795	\$884,671
238160	\$0	\$1,044	\$855,535	\$856,579
238210	\$16,919	\$884,479	\$7,052,987	\$7,937,466
238220	\$815,220	\$815,220	\$8,298,938	\$9,114,158
238290	\$0	\$0	\$2,616,321	\$2,616,321
238310	\$11,176	\$13,156	\$3,343,613	\$3,356,769
238320	\$154,730	\$373,702	\$146,656	\$520,358
238910	\$0	\$0	\$722,155	\$722,155
325413	\$0	\$0	\$3,914,362	\$3,914,362

NAICS	MBE	M/WBE	Non-M/WBE	Total
331110	\$0	\$0	\$1,479,821	\$1,479,821
333316	\$0	\$0	\$3,188,151	\$3,188,151
423220	\$0	\$98,959	\$270,390	\$369,349
423690	\$132,368	\$132,368	\$8,083,000	\$8,215,368
444110	\$0	\$0	\$482,074	\$482,074
524113	\$0	\$0	\$12,463,364	\$12,463,364
524298	\$0	\$0	\$2,538,822	\$2,538,822
532291	\$0	\$0	\$2,022,342	\$2,022,342
541211	\$98,500	\$1,842,111	\$0	\$1,842,111
541219	\$553,731	\$553,731	\$2,117,140	\$2,670,871
541310	\$1,522,081	\$1,664,081	\$4,358,087	\$6,022,168
541330	\$525,801	\$677,274	\$1,478,303	\$2,155,576
541511	\$3,993,400	\$3,993,400	\$0	\$3,993,400
541611	\$0	\$4,411,677	\$2,285,964	\$6,697,641
541618	\$757,492	\$757,492	\$4,019,475	\$4,776,966
541810	\$0	\$0	\$2,285,395	\$2,285,395
541990	\$0	\$547,492	\$0	\$547,492
561110	\$0	\$0	\$7,454,973	\$7,454,973
561320	\$113,430	\$1,225,328	\$1,383,770	\$2,609,098
561440	\$0	\$0	\$6,746,801	\$6,746,801
561499	\$0	\$1,500,000	\$137,255	\$1,637,255
561621	\$0	\$749,976	\$494,328	\$1,244,304
561720	\$22,252	\$30,984	\$8,120,933	\$8,151,916
561990	\$0	\$334,075	\$625,656	\$959,731
621112	\$0	\$0	\$1,828,997	\$1,828,997
621610	\$0	\$0	\$5,111,550	\$5,111,550
Total	\$11,776,190	\$24,628,294	\$112,087,719	\$136,716,012

Source: CHA analysis of PHHS data.

**Table 7d: Distribution of Contract Dollars by Race and Gender, All Sectors
(M/WDBE, Non-M/WBE, Total)
(share of total dollars)**

NAICS	MBE	M/WBE	Non-M/WBE	Total
236118	0.00%	0.00%	100.00%	100.00%
236220	67.42%	73.67%	26.33%	100.00%
237110	0.00%	0.00%	100.00%	100.00%
237310	0.00%	0.41%	99.59%	100.00%
238120	100.00%	100.00%	0.00%	100.00%
238140	0.88%	0.88%	99.12%	100.00%
238150	0.00%	85.89%	14.11%	100.00%
238160	0.00%	0.12%	99.88%	100.00%

NAICS	MBE	M/WBE	Non-M/WBE	Total
238210	0.21%	11.14%	88.86%	100.00%
238220	8.94%	8.94%	91.06%	100.00%
238290	0.00%	0.00%	100.00%	100.00%
238310	0.33%	0.39%	99.61%	100.00%
238320	29.74%	71.82%	28.18%	100.00%
238910	0.00%	0.00%	100.00%	100.00%
325413	0.00%	0.00%	100.00%	100.00%
331110	0.00%	0.00%	100.00%	100.00%
333316	0.00%	0.00%	100.00%	100.00%
423220	0.00%	26.79%	73.21%	100.00%
423690	1.61%	1.61%	98.39%	100.00%
444110	0.00%	0.00%	100.00%	100.00%
524113	0.00%	0.00%	100.00%	100.00%
524298	0.00%	0.00%	100.00%	100.00%
532291	0.00%	0.00%	100.00%	100.00%
541211	5.35%	100.00%	0.00%	100.00%
541219	20.73%	20.73%	79.27%	100.00%
541310	25.27%	27.63%	72.37%	100.00%
541330	24.39%	31.42%	68.58%	100.00%
541511	100.00%	100.00%	0.00%	100.00%
541611	0.00%	65.87%	34.13%	100.00%
541618	15.86%	15.86%	84.14%	100.00%
541810	0.00%	0.00%	100.00%	100.00%
541990	0.00%	100.00%	0.00%	100.00%
561110	0.00%	0.00%	100.00%	100.00%
561320	4.35%	46.96%	53.04%	100.00%
561440	0.00%	0.00%	100.00%	100.00%
561499	0.00%	91.62%	8.38%	100.00%
561621	0.00%	60.27%	39.73%	100.00%
561720	0.27%	0.38%	99.62%	100.00%
561990	0.00%	34.81%	65.19%	100.00%
621112	0.00%	0.00%	100.00%	100.00%
621610	0.00%	0.00%	100.00%	100.00%
Total	8.61%	18.01%	81.99%	100.00%

Source: CHA analysis of PHHS data.

E. The Availability of Minority- and Women-Owned Business Enterprises in PHHS' Markets

1. Methodological Framework

Estimates of the availability of minority- and female-owned firms in PHHS' market area are a critical component of the analysis of possible barriers to equal opportunities to participate in the agency's contracting activities. These availability estimates are compared to the utilization percentage of dollars received by M/WBEs to examine whether these firms receive parity.¹²⁴ Availability estimates are also required to set narrowly tailored contract goals.

We applied the "custom census" approach to estimating availability. As recognized by courts and the National Model Disparity Study Guidelines,¹²⁵ this methodology 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) and the denominator (*e.g.*, registered vendors).
- Next, by examining a comprehensive group of firms, it "casts a broader net" beyond those known to the agency. As recognized by the courts Circuit, this comports with the remedial nature of contracting affirmative action programs by seeking to bring in businesses that have historically been excluded. 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 markets 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. Most courts have held that the results of discrimination— which impact factors affecting capacity— should not be the

¹²⁴ For our analysis, the term "M/WBE" includes firms that are certified by various government agencies such as the Texas Unified Certification Program and 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 that supports the remedial nature of the programs. See *Northern Contracting, Inc. v. 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.").

¹²⁵ National Disparity Study Guidelines, pp.57-58.

benchmark for a program designed to ameliorate the effects of discrimination. They have acknowledged that minority and women firms may be smaller, newer, and otherwise less competitive than non-DBEs 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.¹²⁶

- Fourth, it has been upheld by every court that has reviewed it.¹²⁷

2. Estimation of M/WBE Availability

To conduct the custom census for this study, we took the following steps:

1. Created a database of representative, recent, and completed stated contracts;
2. Identified PHHS’ relevant geographic market by counties;
3. Identified PHHS’ relevant product market by 6-digit NAICS codes;
4. Counted all businesses in the relevant markets using Dun & Bradstreet/Hoovers databases;
5. Identified listed minority-owned and female-owned businesses in the relevant markets; and
6. Assigned ownership status to all other firms in the relevant markets.

As described in sections B and C of this Chapter, we first determined PHHS’ market area and its utilization of firms by 6-digit NAICS codes, aggregated industries and total dollars spent. Based on these results, the share of total dollars spent in each NAICS code for firms in the market area was used to create the overall M/WBE availability estimate for each NAICS code, the availability estimates for each aggregated industry and the availability estimates for all industries.

¹²⁶ For a detailed discussion of the role of capacity in disparity studies, see the National Disparity Study Guidelines, Appendix B, “Understanding Capacity.”

¹²⁷ *Midwest Fence, Corp. v. U.S. Department of Transportation et al*, 2015 WL 1396376 (N. Dist. Ill., March 24, 2015); *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7th Cir. 2007); *Builders Association of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725 (N.D. Ill. 2003).

We purchased the firm information from Hoovers for the firms in the NAICS codes located in PHHS' market area. Hoovers, a Dun & Bradstreet company, 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.

In past years, the data from Hoovers (then Dun & Bradstreet) contained detailed information on the racial identity of the owner(s) of firm. However, recently Hoovers changed its practice and currently, the data simply identify a firm as being minority-owned.¹²⁸ This change required us to revise our approach to determining the racial identity of firms' ownership so as to provide narrowly tailored and accurate analyses concerning possible disparity in an agency's contracting practices.

To provide race detail and improve the accuracy of the race and sex assignments, we created a Master D/M/WBE Directory that combined the results of an exhaustive search for directories and other lists containing information about minority and women-owned businesses. This included the Texas Unified Certification Program; North Central Texas Regional Certification Agency; the State of Texas Historically Underutilized Business Directory; the U.S. Small Business Administration; and many others. In total, we contacted 155 organizations for this Study. The resulting list of minority- and women-owned businesses is comprehensive and, provides data to supplement the Hoovers data base by disaggregating the broad category of "minority-owned" into specific racial groupings. The list of these groups is provided in Appendix A.

We used information from the Master Directory to estimate the specific racial identity of firms in the Hoovers database that are listed as minority-owned. The process involved the following steps:

1. Sort Hoovers by the 6-digit NAICS codes that comprise PHHS' product market area;
2. Identify the number of minority-owned firms in these NAICS codes;
3. Sort the Master Directory by each 6-digit NAICS code in PHHS' product market area;
4. Determine the number of firms in each NAICS code that are minority owned (some firms in the Master Directory are woman-owned firms);
5. Determine the percentage of the minority-owned firms that are owned by:

¹²⁸ The variable is labeled: "Is Minority Owned" and values for the variable can be either "yes" or "no".

- a. Blacks
 - b. Hispanics
 - c. Asians
 - d. Native Americans; and
6. Apply these percentages to the number of minority-owned firms in Hoovers.

Below is an example of how this process works after Hoovers and the Master Directory have been sorted and the number of minority-owned firms in each NAICS code has been identified in Hoovers:

1. Hoovers data base (basic counts in original)

NAICS	Is Minority Owned	Total Firms (Overall)
99999	200	2000

2. Master Directory (basic count in original)

NAICS	Black	Hispanic	Asian	Native American	Total
99999	40	20	4	16	80

3. Master Directory (percentages)

NAICS	Black	Hispanic	Asian	Native American	Total
99999	50%	25%	5%	20%	100%

4. Hoovers data base (with Master Directory percentages applied)

NAICS	Black	Hispanic	Asian	Native American	Is Minority-Owned	Total Firms (Overall)
99999	100	50	10	40	200	2000

An important element to determining availability is to properly assign a race and gender label to each firm owner. As discussed above, we took the answers that Hoovers provides to two broad questions (“Is the firm minority-owned” and “Is the firm female-owned”) and disaggregated the responses to the “minority owned” question into specific racial categories. However, another concern is that firm ownership has been racially misclassified. There can be three sources of the

misclassification: 1. A firm that has been classified as non-M/WBE owned is actually M/WBE owned. 2. A firm that has been classified as M/WBE owned is actually non-M/WBE owned. 3. A firm that has been classified as a particular type of M/WBE firm (e.g., Black) is actually another type of M/WBE firm (e.g., Hispanic).

Based upon the results of these classifications and further assignments, we estimated the availability of M/WBEs as a percentage of total firms. M/WBE unweighted availability is defined as the number of M/WBEs divided by the total number of firms in Parkland’s market area.

Table 8 presents data on the unweighted availability by race and gender and by NAICS codes for all industries in the product market.

Table 8: Unweighted Availability, All Sectors

NAICS	Black	Hispanic	Asian	Native American	White Women	M/WBE	Non-M/WBE	Total
236118	4.37%	2.54%	0.84%	0.30%	2.87%	10.91%	89.09%	100.00%
236220	15.09%	12.10%	4.02%	2.53%	11.19%	44.93%	55.07%	100.00%
237110	7.97%	14.23%	2.99%	1.27%	13.06%	39.52%	60.48%	100.00%
237310	13.02%	7.55%	2.79%	1.10%	8.87%	33.33%	66.67%	100.00%
238120	8.40%	31.60%	1.73%	4.36%	14.06%	60.16%	39.84%	100.00%
238140	9.99%	10.42%	1.29%	0.27%	4.80%	26.77%	73.23%	100.00%
238150	3.45%	1.69%	0.84%	1.10%	15.93%	23.01%	76.99%	100.00%
238160	2.80%	2.70%	0.89%	0.52%	5.43%	12.35%	87.65%	100.00%
238210	6.27%	5.48%	1.93%	0.54%	7.06%	21.28%	78.72%	100.00%
238220	3.64%	3.14%	0.88%	0.37%	4.97%	13.01%	86.99%	100.00%
238290	8.42%	6.91%	1.50%	2.65%	18.18%	37.66%	62.34%	100.00%
238310	4.88%	6.89%	1.61%	0.82%	7.51%	21.70%	78.30%	100.00%
238320	4.84%	4.84%	0.89%	0.27%	5.67%	16.51%	83.49%	100.00%
238910	9.58%	10.09%	1.64%	1.03%	11.99%	34.33%	65.67%	100.00%
325413	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
331110	4.31%	1.87%	0.93%	0.24%	7.35%	14.71%	85.29%	100.00%
333316	1.93%	1.27%	0.63%	0.17%	0.00%	4.00%	96.00%	100.00%
423220	3.74%	1.84%	1.11%	0.19%	12.79%	19.66%	80.34%	100.00%
423690	6.61%	4.20%	3.44%	0.83%	9.34%	24.42%	75.58%	100.00%
444110	0.54%	0.21%	0.10%	0.03%	2.87%	3.75%	96.25%	100.00%
524113	1.66%	1.28%	0.36%	0.09%	2.82%	6.21%	93.79%	100.00%
524298	5.61%	2.28%	2.22%	0.70%	7.57%	18.38%	81.62%	100.00%
532291	4.57%	1.48%	0.74%	0.19%	13.95%	20.93%	79.07%	100.00%
541211	2.87%	1.12%	0.74%	0.24%	6.03%	10.99%	89.01%	100.00%
541219	4.38%	2.66%	1.15%	0.23%	13.62%	22.04%	77.96%	100.00%
541310	7.72%	7.77%	3.38%	0.96%	9.67%	29.51%	70.49%	100.00%
541330	8.61%	7.03%	6.54%	0.90%	8.96%	32.03%	67.97%	100.00%

NAICS	Black	Hispanic	Asian	Native American	White Women	M/WBE	Non-M/WBE	Total
541511	7.83%	3.97%	6.95%	0.69%	7.88%	27.32%	72.68%	100.00%
541611	7.77%	3.68%	1.71%	0.45%	9.86%	23.47%	76.53%	100.00%
541618	2.10%	1.17%	0.65%	0.16%	4.22%	8.29%	91.71%	100.00%
541810	7.27%	3.93%	1.22%	0.47%	17.33%	30.22%	69.78%	100.00%
541990	0.95%	0.58%	0.35%	0.08%	4.03%	5.99%	94.01%	100.00%
561110	1.51%	0.87%	0.43%	0.13%	2.30%	5.24%	94.76%	100.00%
561320	8.46%	4.19%	2.59%	0.75%	14.36%	30.35%	69.65%	100.00%
561440	5.45%	3.37%	1.33%	0.35%	7.69%	18.18%	81.82%	100.00%
561499	1.41%	0.87%	0.38%	0.11%	3.61%	6.38%	93.62%	100.00%
561621	6.41%	5.90%	1.24%	0.59%	13.35%	27.49%	72.51%	100.00%
561720	14.62%	7.51%	3.21%	0.60%	8.88%	34.81%	65.19%	100.00%
561990	0.27%	0.18%	0.08%	0.02%	1.23%	1.78%	98.22%	100.00%
621112	2.32%	0.96%	0.60%	0.09%	5.96%	9.93%	90.07%	100.00%
621610	9.38%	3.34%	1.80%	0.42%	7.79%	22.73%	77.27%	100.00%
TOTAL	2.65%	1.75%	0.87%	0.23%	4.03%	9.53%	90.47%	100.00%

Source: CHA analysis of PHHS data.

To further meet the constitutional requirement that the availability estimates that will be used to set goals are narrowly tailored, we then weighted the availability estimate for each of the aggregated industries in the NAICS codes by the share of PHHS' spending in each code. Table 9 presents these weights.

Table 9: Share of PHHS Spending by NAICS Code, All Sectors

NAICS	NAICS Code Description	WEIGHT (PCT SHARE of TOTAL SECTOR DOLLARS)
524113	Direct Life Insurance Carriers	9.12%
238220	Plumbing, Heating, and Air-Conditioning Contractors	6.67%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	6.01%
561720	Janitorial Services	5.96%
238210	Electrical Contractors and Other Wiring Installation Contractors	5.81%
561110	Office Administrative Services	5.45%
561440	Collection Agencies	4.93%
541611	Administrative Management and General Management Consulting Services	4.90%

NAICS	NAICS Code Description	WEIGHT (PCT SHARE of TOTAL SECTOR DOLLARS)
541310	Architectural Services	4.40%
621610	Home Health Care Services	3.74%
541618	Other Management Consulting Services	3.49%
541511	Custom Computer Programming Services	2.92%
325413	In-Vitro Diagnostic Substance Manufacturing	2.86%
238310	Drywall and Insulation Contractors	2.46%
237310	Highway, Street, and Bridge Construction	2.33%
333316	Photographic and Photocopying Equipment Manufacturing	2.33%
236220	Commercial and Institutional Building Construction	2.22%
541219	Other Accounting Services	1.95%
238290	Other Building Equipment Contractors	1.91%
561320	Temporary Help Services	1.91%
524298	All Other Insurance Related Activities	1.86%
541810	Advertising Agencies	1.67%
541330	Engineering Services	1.58%
532291	Home Health Equipment Rental	1.48%
541211	Offices of Certified Public Accountants	1.35%
621112	Offices of Physicians, Mental Health Specialists	1.34%
561499	All Other Business Support Services	1.20%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	1.08%
561621	Security Systems Services (except Locksmiths)	0.91%
238140	Masonry Contractors	0.79%
238120	Structural Steel and Precast Concrete Contractors	0.73%
561990	All Other Support Services	0.70%
238150	Glass and Glazing Contractors	0.65%
238160	Roofing Contractors	0.63%
238910	Site Preparation Contractors	0.53%
236118	Residential Remodelers	0.48%
541990	All Other Professional, Scientific, and Technical Services	0.40%

NAICS	NAICS Code Description	WEIGHT (PCT SHARE of TOTAL SECTOR DOLLARS)
238320	Painting and Wall Covering Contractors	0.38%
444110	Home Centers	0.35%
423220	Home Furnishing Merchant Wholesalers	0.27%
237110	Water and Sewer Line and Related Structures Construction	0.24%
TOTAL		100.00%

Source: CHA analysis of PHHS data.

Table 10 presents the final estimates of the weighted averages of all the individual 6-digit level availability estimates in Parkland’s market area. These weighted availability estimates can be used to set an overall MBE and a WBE goal for PHHS procurement.

Table 10: Aggregated Weighted Availability, All Sectors (total dollars)

NAICS	Black	Hispanic	Asian	Native American	White Women	M/WBE	Non-M/WBE	Total
TOTAL	5.89%	4.09%	1.81%	0.56%	7.36%	19.71%	80.28%	100.00%

Source: CHA analysis of PHHS data.

F. Analysis of Race and Gender Disparities in PHHS’ Utilization of M/WBEs

To meet the strict scrutiny requirement that PHHS consider evidence of disparities to establish its compelling interest in remedying discrimination in its market area, we next calculated disparity ratios for total M/WBE utilization compared to the total weighted availability of M/WBEs, measured in dollars paid. Tables 13 through provides the results of our analysis.

A “large” or “substantively significant” disparity is commonly defined by courts as utilization that is equal to or less than 80 percent of the availability measure. A substantively significant disparity supports the inference that the result may be caused by the disparate impacts of discrimination.¹²⁹ A statistically significant

¹²⁹ See U.S. Equal Opportunity Employment 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.”).

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. One asterisk indicates substantive significance. Two asterisks indicate statistical significance. A more in depth discussion of statistical significance is provided in Appendix D.

Table 11: Disparity Ratios by Demographic Group, All Sectors

	Disparity Ratio
Black	11.70%*
Hispanic	83.14%
Asian	244.25%
Native American	18.88%*
White Women	127.73%
M/WBE	91.38%
Non-M/WBE	102.13%

Source: CHA analysis of PHHS data.

* Indicates substantive significance.

V. ANALYSIS OF DISPARITIES IN PHHS' ECONOMY

A. Introduction

Nobel 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.¹³⁰

This Chapter explores the data and literature relevant to how discrimination in the PHHS' area market, which we define as the Dallas area, and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in Parkland's contract opportunities. First, we analyzed the rates at which M/WBEs in the Dallas metropolitan area 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 interventions.

A key element to determine the need for government intervention through contract goals in the sectors of the economy where PHHS procures goods and services is an analysis of the extent of disparities in those sectors independent of the agency's intervention through its contracting affirmative action programs. The courts have repeatedly held that analysis of disparities in the rates at which minority- and women-owned business enterprises ("M/WBEs") in the government's markets form businesses compared to similar non-M/WBEs, and their earnings from such businesses, are highly relevant to the determination whether the market functions properly for all firms regardless of the race or gender of their ownership.¹³¹

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 whether the market functions properly for all firms regardless of the race or gender of their ownership. These

¹³⁰ Arrow, Kenneth J., "What Has Economics to say about racial discrimination?", *Journal of Economic Perspectives*, (1998), 12(2), pp. 91-100.

¹³¹ See the discussion in Chapter II of the legal standards applicable to contracting affirmative action programs.

analyses contributed to the successful defense of Chicago's construction program.¹³² As 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.¹³³

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. "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."¹³⁴ 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."

For example, in unanimously upholding the USDOT DBE Program, 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

¹³² *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 met compelling interest using this framework).

¹³³ *Adarand VII*, 228 F.3d at 1168-69.

¹³⁴ *Id.*

business owners are strong evidence of the continuing effects of discrimination.¹³⁵ 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.¹³⁶

To conduct this type of court-approved economy-wide analysis, we utilized U.S. Bureau of the Census datasets to address the central question whether firms owned by non-Whites and White women face disparate treatment in PHHS’ marketplace.¹³⁷

We explored the existence of any disparities by analyzing two datasets, each of which permits examination of the issue from a unique vantage point.

- The Census Bureau’s *Survey of Business Owners* allows us to examine disparities using individual firms as the basic unit of analysis.
- The Census Bureau’s *American Community Survey* allows us to examine disparities using individual entrepreneurs as the basic unit of analysis.¹³⁸

Using both data sets, we found disparities for minorities and women across most industry sectors in Parkland’s marketplace.

¹³⁵ *Id.*; *Western States*, 407 F.3d at 993; *Northern Contracting I*, 2004 U.S. Dist. LEXIS 3226 at *64.

¹³⁶ *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.”).

¹³⁷ While this is often described as a “private sector analysis,” a more accurate description is an “economy-wide” analysis because expenditures by the public sector are included in the Census databases.

¹³⁸ Data from 2010-12 American Community Survey are the most recent for a three-year period.

B. Summary of Findings

1. Disparities in Firm Sales and Payroll

One way to measure equity is to examine the share of total sales and/or payroll a group has relative to its share of total firms. Parity would be represented by the ratio of sales or payroll share over the share of total firms equaling 100% (*i.e.*, a group has 10% of total sales and comprises 10% of all firms.) A ratio that is less than 100% indicates an underutilization of a demographic group, and a ratio of more than 100% indicates an overutilization of a demographic group. Table 12 presents data from the Census Bureau’s Survey of Business Owners that indicate very large disparities between non-White and White women-owned 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. In contrast, the firms that were not non-White and not White women-owned were overutilized using the identical metric.¹³⁹

**Table 12. Disparity Ratios of Firm Utilization Measures
All Industries,
Survey of Business Owners, 2007**

	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
Non-whites	11.4%	18.2%	65.7%
White Women	17.4%	22.6%	75.6%
Not Non-White/Not White Women	187.1%	132.5%	103.9%

Source: CHA Calculations from Survey of Business Owners

2. Disparities in Wages and Business Earnings

Another way to measure equity is to examine how the economic utilization of particular demographic groups compares to White men. Multiple regression statistical techniques allowed us to examine the impact of race and gender on economic outcome while controlling for other factors, such as education, that might impact outcomes.¹⁴⁰ Using these techniques and data from the Census Bureau’s American Community Survey, we found that Blacks, Latinos, Native Americans, Asian/Pacific Islanders, Others, and White women were underutilized relative to White men: controlling for other factors relevant to business success,

¹³⁹ The Survey of Business Owners data available via American Fact Finder do not permit the use of regression analysis on these results.

¹⁴⁰ See Appendix C for more information on multiple regression statistical analysis.

wages and business earnings were lower for these groups compared to White men. We report wages and business earnings because disparities in wages and business earnings can lead to disparities in business outcomes. These findings are presented in Table 13. Parity would exist if the figures in Table 2 were 0.0%; in other words, there is not a difference between the wages and/or business earnings received by non-Whites and White women and those received by White men. When the table indicates that the wage differential between Blacks and White men is -35.0%, for example, this means that wages received by Blacks are 35.0% less than wages received by similar White men. Because of these disparities, the rates at which these groups formed businesses were lower than the business formation rate of similarly situated White men.

**Table 13. Economic Outcome Differentials of Minorities and White Women Relative to White Males
All Industries,
American Community Survey, 2010 - 2012**

Demographic Group	Wages Differentials Relative to White Men (% Change)	Business Earnings Relative to White Men (% Change)
Black	-35.0%	-63.9%
Latino	-16.4%	-13.0%
Native American	-19.3%	-25.1%
Asian/Pacific Islander	-34.8%	-19.3%
Other	-37.0%	-208%
White Women	-32.5%	-69.3%

Source: CHA calculations from the American Community Survey

3. Disparities in Business Formation

A third 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' American Community Survey. Table 14a presents these results. The table indicates that White men have higher business formation rates compared to non-Whites and White women. Table 14b explores the same question but utilizes multiple regression analysis to control for important factors beyond race and gender. It indicates that non-Whites and White women are less likely to form

businesses compared to similarly situated White men. For instance, Blacks are 3.56% less likely to form a business compared to White men after other key explanatory variables are controlled. These Tables reinforce the notion that there are significant differences in the rate of non-Whites and White women to form business compared to the rate of White men. These differences support the inference that minority- and women-owned business enterprises (“M/WBEs”) suffer major barriers to equal access to entrepreneurial opportunities in the overall Dallas metropolitan area economy.

**Table 14a. Business Formation Rates
All Industries,**

Demographic Group	Business Formation Rates
Black	5.26%
Latino	7.99%
Native American	10.70%
Asian/Pacific Islander	10.47%
Other	11.21%
Non-White	7.52%
White Women	8.36%
Non-White Male	7.87%
White Male	12.63%

Source: CHA calculations from the American Community Survey

**Table 14b. Business Formation Probabilities Relative to White Males
All Industries,**

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-3.56%
Latino	-2.77%
Native American	-1.20%
Asian/Pacific Islander	-0.29%
Other	-0.04%
White Women	-2.06%

Source: CHA calculations from the American Community Survey

Overall, the results of our analyses of the Dallas metropolitan area economy demonstrate that minorities and White women continue to face race- and gender-based barriers to equal opportunities as firm owners, and to equal opportunities to earn wages and salaries that impact their ability to form firms and to earn income from those firms. While not dispositive, this suggests that absent some affirmative intervention in the current operations of the Dallas metropolitan area

marketplace, Parkland will function as a passive participant in these potentially discriminatory outcomes.¹⁴¹

C. Disparate Treatment in the Marketplace: Evidence from the Census Bureau’s 2007 Survey of Business Owners

Every five years, the Census Bureau administers the *Survey of Business Owners* (“SBO”) to collect data on particular characteristics of businesses that report to the Internal Revenue Service receipts of \$1,000 or more.¹⁴² The 2007 SBO was released on August 16, 2012, so our analysis reflects the most current data available. The SBO collects demographic data on business owners disaggregated into the following groups:^{143, 144}

- Non-Hispanic Blacks
- Latinos
- 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 where the ownership could not be classified
- Publicly-Owned Firms

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 women-owned firms, the last five groups were aggregated to form one

¹⁴¹ Various appendices to this Chapter contain additional data and methodological explanations. Appendix A provides a “Further Explanation of the Multiple Regression Analysis.” Appendix B provides a “Further Explanation of Probit Regression Analysis.” Appendix C discusses the meaning and role of “Significance Levels.” Appendix D provides detailed “Additional Data from the Analysis of the Survey of Business Owners.” Appendix E provides “Additional Data from the Analysis of American Community Survey.”

¹⁴² See <http://www.census.gov/econ/sbo/about.html> for more information on the Survey.

¹⁴³ Race and gender labels reflect the categories used by the Census Bureau.

¹⁴⁴ 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 Latino.

category. To ensure this aggregated group is described accurately, we label this group “not non-White/non-White women”. While this label is cumbersome, it is important to be clear this group includes firms whose ownership extends beyond White men, such as firms that are not classifiable or that are publicly traded and thus have no racial ownership.

In addition to the ownership demographic data, the Survey also gathers information on the sales, number of paid employees, and payroll for each reporting firm.

To examine those sectors in which PHHS purchases, we analyzed economy-wide SBO data on the following sectors:

- Construction
- Professional, Scientific and Technical Services
- Information technology
- Goods
- Services

However, the nature of the SBO 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 2-digit North American Industry Classification System (“NAICS”) code level and therefore our sector definitions do not exactly correspond to the definitions used to analyze PHHS’ contract data in Chapter IV, where we are able to determine sectors at the 6-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.¹⁴⁵ We therefore report 2-digit data.

¹⁴⁵ Even with these broad sector definitions, there was an insufficient number of Native American owned firms to perform our analysis on this demographic group. This limitation also arose for Latinos and Asians in the Services sector.

Table 15 presents information on which NAICS codes were used to define each sector.

Table 15. 2-Digit NAICS Code Definition of Sector

SBO Sector Label	2-Digit NAICS Codes
Construction	23
Professional, Scientific, and Technical Services ¹⁴⁶	54
Information	51
Goods	31-33,42, 44
Services	48, 52, 53, 56, 61, 62, 71, 72, 81

The balance of this Chapter section reports the findings of the SBO analysis. For each sector, we present data describing the sector and report disparities within the sector.

1. All SBO Industries

For a baseline analysis, we examined all industries in the state of Dallas metropolitan area. Data are not available beyond the state level. Table 5 presents data on the percentage share that each group has of the total of each of the following six business outcomes:

- The number of all firms
- The sales and receipts of all firms
- 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 employers firms

Panel A of Table 16 presents data for the four basic non-White racial groups:

- Black
- Latino

¹⁴⁶ 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.

- Native American
- Asian

Panel B of Table 16 presents data for six types of firm ownership:

- Non-white
- White Women
- White Men
- Equally non-Whites and Whites
- Equally women and men
- Firms that are publicly owned or not classifiable

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.¹⁴⁷

**Table 16. Percentage Demographic Distribution of Sales and Payroll Data
All Industries, 2007**

	Total Number of Firms (All Firms)	Sales & Receipts - All Firms (\$1,000)	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	6.9%	0.3%	1.8%	0.2%	0.8%	0.4%
Latino	20.7%	2.4%	11.0%	1.8%	4.5%	2.8%
Native American	0.6%	0.1%	0.3%	0.1%	0.1%	0.1%
Asian	5.1%	1.5%	7.6%	1.4%	2.3%	1.5%
Panel B: Distribution of All Firms						
Non-White	33.4%	3.8%	17.3%	3.1%	6.6%	4.3%
White Women	16.8%	2.9%	11.6%	2.6%	4.9%	3.7%
White Men	32.4%	21.6%	40.2%	21.0%	28.4%	25.8%

¹⁴⁷ Some of the figures in Panel B may not correspond to the related figures in Panel A because of discrepancies in how the SBO reports the data

Equally Non-White & White	2.2%	0.2%	0.5%	0.2%	0.3%	0.2%
Equally Women & Men	12.8%	4.2%	20.4%	3.6%	7.6%	4.9%
Firms Not Classifiable	2.5%	67.2%	10.0%	69.4%	52.3%	61.0%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

Since the central issue is the possible disparate treatment of non-White and White women firms, Table 17 re-aggregates the last four groups– White men; equally non-White and White; equally women and men; and firms not classifiable– into one group: Not Non-White/Not White Women.¹⁴⁸ (Thus, data in the rows for Black, Latino, Native American, Asian, Non-Whites, and White Women is identical in Tables 16 and 17.) We then present the shares each group has of the six indicators of firm utilization. These data were then used to calculate three disparity ratios, presented in Table 18:

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

**Table 17. Demographic Distribution of Sales and Payroll Data
All Industries, 2007**

	Total Number of Firms (All Firms)	Sales & Receipts - All Firms (\$1,000)	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	6.9%	0.3%	1.8%	0.2%	0.8%	0.4%
Latino	20.7%	2.4%	11.0%	1.8%	4.5%	2.8%
Native American	0.6%	0.1%	0.3%	0.1%	0.1%	0.1%

¹⁴⁸ 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.

	Total Number of Firms (All Firms)	Sales & Receipts - All Firms (\$1,000)	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)
Asian	5.1%	1.5%	7.6%	1.4%	2.3%	1.5%
Panel B: Distribution of All Firms						
Non-Whites	33.4%	3.8%	17.3%	3.1%	6.6%	4.3%
White Women	16.8%	2.9%	11.6%	2.6%	4.9%	3.7%
Not Non-White/Not White Women	49.8%	93.3%	71.1%	94.2%	88.5%	91.9%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

For example, the disparity ratio of sales and receipts share for all firms over the share of total number of all firms for Black firms is 4.7% (as shown in Table 18). This is derived by taking the Black share of sales and receipts for all firms (0.3%) and dividing it by the Black share of total number of all firms (6.9%) that are presented in Table 17.¹⁴⁹ If Black-owned firms earned a share of sales equal to their share of total firms, the disparity would have been 100%. An index less than 100 percent 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 percent” rule that a ratio less than 80 percent presents a *prima facie* case of discrimination.¹⁵⁰ Except for the Black ratio of payroll to the number of employer firms, all disparity ratios for non-White firms and White women firms are below this threshold.¹⁵¹

¹⁴⁹ Note: the numbers in Tables 16 and 17 are rounded to the first decimal point and thus, approximations of the actual numbers. Hence, the result in Table 7—derived through calculations with the actual numbers—will not equal the number calculated by using the approximate numbers presented in Tables 16 and 17.

¹⁵⁰ 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.”).

¹⁵¹ Because the data in Tables 17 and 18 are presented for descriptive purposes, significance tests on these results are not conducted.

**Table 18. Disparity Ratios of Firm Utilization Measures
All Industries, 2007**

	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	4.7%	12.0%	53.3%
Latino	11.4%	16.4%	61.3%
Native American	21.6%	32.1%	93.8%
Asian	29.5%	18.4%	63.1%
Panel B: Disparity Ratios for All Firms			
Non-Whites	11.4%	18.2%	65.7%
White Women	17.4%	22.6%	75.6%
Not Non-White/Not White Women	187.1%	132.5%	103.9%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

This same approach was used to examine the key sectors in which PHHS purchases. The underlying data on the various industries of construction; professional, scientific and technical services; information technology; and services are presented in Appendix E to this report. The following are summaries of the results of the disparity analyses.

2. Construction

Of the 15 disparity ratios for non-White firms and White women firms presented in Table 19, 13 fall under the 80% threshold.¹⁵²

¹⁵² The values of “S” in Table 19 and Tables 20-21 reflect that the SBO did not publish data in these instances because it was “withheld because estimate did not meet publication standards”. See the Disclosure section under Methodology at <http://www.census.gov/econ/sbo/methodology.html>.

**Table 19. Disparity Ratios – Aggregated Groups
Construction, 2007**

	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	14.2%	33.8%	65.8%
Latino	24.0%	32.9%	68.2%
Native American	49.6%	45.4%	88.5%
Asian	S	S	S
Panel B: Disparity Ratios for All Firms			
Non-White	22.3%	39.2%	72.9%
White Women	79.8%	67.0%	84.6%
Not Non-White/Not White Women	151.8%	113.5%	103.4%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

3. Professional, Scientific and Technical Services

Table 20 presents disparity ratios in this sector. All but two of the available disparity ratios for non-White firms and White women firms presented in Table 9 are under the 80% threshold.

**Table 20. Disparity Ratios – Aggregated Groups
Professional, Scientific, and Technical Services, 2007**

	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	13.6%	26.5%	63.4%
Latino	29.0%	34.6%	68.4%
Native American	27.6%	59.9%	96.4%
Asian	42.8%	40.2%	92.4%
Panel B: Disparity Ratios for All Firms			

Non-White	27.1%	39.6%	77.4%
White Women	31.2%	36.2%	75.3%
Not Non-White/Not White Women	149.2%	123.0%	103.8%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

4. Information

Eleven of the available 16 disparity ratios for non-White firms and White women firms presented in Table 21 fall below the 80% threshold.

Table 21. Disparity Ratios – Aggregated Groups Information, 2007

	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	2.5%	S	S
Latino	5.2%	12.8%	75.8%
Native American	6.6%	15.8%	83.1%
Asian	98.8%	86.1%	89.7%
Panel B: Disparity Ratios for All Firms			
Non-White	21.6%	64.1%	89.8%
White Women	7.9%	12.3%	67.6%
Not Non-White/Not White Women	168.3%	115.9%	101.2%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

5. Services

Of the available 15 disparity ratios for non-White firms and White women firms presented in Table 22, all fall below the 80% threshold.

**Table 22. Disparity Ratios – Aggregated Groups
All Services, 2007**

	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	9.6%	20.1%	57.5%
Latino	20.1%	25.5%	65.1%
Native American	S	S	S
Asian	37.8%	23.3%	67.3%
Panel B: Disparity Ratios for All Firms			
Non-White	17.6%	25.6%	69.5%
White Women	22.4%	27.3%	74.0%
Not Non-White/Not White Women	202.1%	135.0%	104.9%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

6. Goods

Of the 10 available disparity ratios for non-White firms and White women firms presented in Table 12, 9 fall below the 80% threshold.

**Table 23. Disparity Ratios – Aggregated Groups
Goods, 2007**

	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	S	S	S
Latino	7.7%	14.1%	75.0%
Native American	S	S	S
Asian	19.0%	11.1%	65.0%
Panel B: Disparity Ratios for All Firms			
Non-White	8.4%	S	S
White Women	12.3%	20.9%	90.0%
Not Non-White/Not White Women	189.3%	S	S
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

D. Disparate Treatment in the Marketplace: Evidence from the Census Bureau's 2010-2012 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 PHHS' M/WBE program.

In the previous section, we explored this question using SBO data. In this section, we use the Census Bureau's *American Community Survey* data to address other aspects of this question. One element asks if there exist demographic differences in the wage and salary income received by private sector workers. Beyond the issue of bias in the incomes generated in the private sector, this exploration is important for the issue of possible variations in the rate of business formation by different demographic groups. One of the determinants of business formation is the pool of financial capital at the disposal of the prospective entrepreneur. The size of this pool is related to the income level of the individual either because the income level impacts the amount of personal savings that can be used for start-up capital or the income level affects one's ability to borrow funds. If particular demographic groups receive lower wages and salaries then they would have access to a smaller pool of financial capital, and thus reduce the likelihood of business formation.

The *American Community Survey* ("ACS") *Public Use Microdata Sample* ("PUMS") is useful in addressing these issues. The ACS is an annual survey of 1% of the population and the PUMS provides detailed information at the individual level. In order to obtain robust results from our analysis, we use the file that combines data for 2007 through 2011, the most recent available.¹⁵³ With this rich data set, our analysis can establish with greater certainty any causal links between race, gender and economic outcomes.

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, but 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 the 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

¹⁵³ For more information about the ACS PUMS, please see <http://www.census.gov/acs/>.

have the ability to include a wide range of additional variables such as age, education, occupation, and state of residence.

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

With respect to the first result of regression analysis, we will 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 are determining 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, this technique also allows us to determine the statistical significance of the relationship between the dependent variable and independent variable. For example, the relationship between gender and wages might exist 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 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 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 we are 99.9% confident that the relationship is different from zero.¹⁵⁴

In the balance of this section, we report data on the following sectors:

- All Industries
- Construction

¹⁵⁴ Most social scientists do not endorse utilizing a confidence level of less than 95%. Appendix C explains more about statistical significance.

- Construction-related Services
- Information Technology
- Services
- Goods

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).

1. All Industries in Dallas Metropolitan Area

a. Business Formation Rates

Table 24 presents business formation rates in the Dallas metropolitan area economy by demographic groups.

**Table 24. Business Formation Rates,
All Industries, 2010-2012**

Demographic Group	Business Formation Rates
Black	5.26%
Latino	7.99%
Native American	10.70%
Asian/Pacific Islander	10.47%
Other	11.21%
Non-White	7.52%
White Women	8.36%
Non-White Male	7.87%
White Male	12.63%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-White males. However, as with the issue of income and earnings differences, the higher rates could be attributed to factors aside from race and/or gender. To explore this question further, a probit regression statistical technique was employed.¹⁵⁵ The

¹⁵⁵ Probit is a special type of regression technique where the dependent variable only has two possible values: 0 or 1. For instance, the unit of observation is an individual and he/she forms a business or does not form a business. In the former case, the value of the dependent variable would be 1 while in the latter case, the value of the dependent variable would be 0. This is in contrast to the multiple regression technique discussed earlier where the dependent variable such

basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 25 presents the results of the probit analysis for the Dallas metropolitan area economy.

Table 25. Business Formation Probabilities for Selected Groups Relative to White Males All Industries, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-3.56%***
Latino	-2.77%***
Native American	-1.20%***
Asian/Pacific Islander	-0.29%***
Other	-0.04%
White Women	-2.06%***

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

With the exception of Other, the analysis indicates that non-Whites and White women in Dallas metropolitan area are less likely than White men to form businesses even after controlling for key factors. The reduction in probability ranges from 0.29% to 3.56%. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 26 presents the findings from the wage and salary income regression analysis examining the Dallas metropolitan area economy. This indicates the wage differential for selected demographic groups in Dallas metropolitan area relative to White men.

Table 26. Wage Differentials for Selected Groups Relative to White Men All Industries, 2010-2012

Independent Variable	Coefficient
Black	-35.0%***
Latino	-16.4%***
Native American	-19.3%**
Asian/Pacific Islander	-34.8%***
Other	-37.0%***
White Women	-32.5%***

as wages might have any non-negative value. For a more extensive discussion of probit regression analysis, see Appendix B.

Source: CHA calculations from the American Community Survey

*** Indicates statistical significance at the 0.001 level

** Indicates statistical significance at the 0.01 level

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, White women, Asian/Pacific Islanders and Others in Dallas metropolitan area earn less than White men in the overall economy. Estimates of the coefficients for Black, Latino, Asian/Pacific Islander, White Women, and Other are statistically significant at the 0.001 level. The estimate of the coefficient for Native American is statistically significant at the 0.01 level. For example, we are 99.9% confident that wages for Blacks in Dallas metropolitan area (after controlling for numerous other factors) are 35.0% less than those received by White men.

c. Differences in Business Earnings

The same approach was used to investigate if there were differences in business earnings received by Non-Whites and White women entrepreneurs and White male entrepreneurs. Using the PUMS, we limited the sample to the self-employed and examined how their business income varied in response to factors such as race, gender, age, education, and industry. Table 27 presents these findings.

**Table 27. Business Earnings Differentials for Selected Groups
Relative to White Men
All Industries, 2010-2012**

Independent Variable	Coefficient
Black	-63.9%***
Latino	-13.0%*
Native American	-25.1%
Asian/Pacific Islander	-19.3%*
Other	-208.0%***
White Women	-69.3%***

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

* indicates statistical significance at the 0.05 level

Once again, the estimates of the coefficients for the Black, Other, and White Women variables were found to be statistically significant at the 0.001 level. The coefficients for Latino and Asian/Pacific Islander were found to be statistically significant at the 0.05 level. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from -13.0% to -208.0%. (The proper interpretation of the estimated coefficient for Other is that White men earn 208.0% greater than similarly situated Others.)

d. Conclusion

Using descriptive analysis, Table 28 shows that differentials exist between the business formation rates by Non-Whites and White women and White males across industry sectors. Table 29 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 28 and 29 present data indicating differentials in wages and business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect Non-Whites and White women entrepreneurs.

2. The Construction Industry in the Dallas metropolitan area

a. Business Formation Rates

Table 28 presents business formation rates in the Dallas metropolitan area construction industry for selected demographic groups.

**Table 28. Business Formation Rates,
Construction, 2010-2012**

Demographic Group	Business Formation Rates
Black	19.43%
Latino	16.38%
Native American	15.38%
Asian/Pacific Islander	23.08%
Other	12.50%
Non-White	16.79%
White Women	17.97%
Non-White Male	16.95%
White Male	32.57%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-White males. However, as with the issue of income and earnings differences, the higher rates could be attributed to factors aside from race and/or gender. To explore this question further, a probit regression statistical technique was employed. The basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 29 presents the results of the probit analysis for the construction industry in Dallas metropolitan area.

**Table 29. Business Formation Probability Differentials for Selected Groups
Relative to White Men
Construction, 2010-2012**

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-9.77%***
Latino	-12.51%***
Native American	-8.56%***
Asian/Pacific Islander	-8.83%***
Other	-15.25%***
White Women	-5.31%***

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

The analysis indicates that Non-Whites and White women in Dallas metropolitan area are less likely to form construction businesses compared to White men even after controlling for key factors. The reduction in probability ranges from 5.31% to 15.25%. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 30 presents the findings from the wage and salary income regression analysis examining the construction industry in Dallas metropolitan area. This indicates the wage differential for selected demographic groups in Dallas metropolitan area relative to White men.

**Table 30. Wage Differentials for Selected Groups
Relative to White Men
Construction, 2010-2012**

Independent Variable	Coefficient
Black	-21.1%**
Latino	-4.54%
Native American	-12.5%
Asian/Pacific Islander	-3.56%
Other	25.1%
White Women	-35.5%***

Source: CHA calculations from the American Community Survey
*** Indicates statistical significance at the 0.001 level
** Indicates statistical significance at the 0.01 level

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, Native Americans, White women, Asian/Pacific Islanders in Dallas metropolitan area earn less than White men in the construction industry. The differential ranges between 3.56% less and 35.5% less. The estimate of the coefficient for White Women is statistically significant at the 0.001 level. The estimate of the coefficient for Black is statistically significant at the 0.01 level.

c. Differences in Business Earnings

The same approach was used to investigate if there were differences in business earnings received by Non-White male entrepreneurs and White male entrepreneurs. Using the PUMS, we limited the sample to the self-employed and examined how their business income varied in response to factors such as race, gender, age, education, and industry. Table 31 presents these findings.

Table 31. Business Earnings Differentials for Selected Groups Relative to White Men Construction, 2010-2012

Independent Variable	Coefficient
Black	-125.0%***
Latino	3.54%
Native American	-15.2%
Asian/Pacific Islander	-44.9%
Other	-8.78%***
White Women	-19.3%

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

The estimated coefficients for Black and Other were found to be statistically significant at the 0.001 levels. The remaining coefficients were not found to be significantly statistically different from zero.

d. Conclusion

Using descriptive analysis, Table 32 shows that differentials exist between the business formation rates by Non-White males and White males. Table 33 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 32 and 33 present data indicating differentials in wage and business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect Non-Whites and White women entrepreneurs.

3. The Construction-Related Services Industry in Dallas metropolitan area

a. Business Formation Rates

Table 32 presents business formation rates in the construction-related services industry in Dallas metropolitan area for selected demographic groups.

Table 32. Business Formation Rates, Construction-Related Services, 2010-2012

Demographic Group	Business Formation Rates
Black	7.41%

Latino	11.76%
Native American	16.67%
Asian/Pacific Islander	6.02%
Other	0.00%
Non-White	8.77%
White Women	6.19%
Non-White Male	7.49%
White Male	11.94%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-White males. (The one exception was Native Americans.) However, as with the issue of income and earnings differences, the higher rates could be attributed to factors aside from race and/or gender. To explore this question further, a probit regression statistical technique was employed. The basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 33 presents the results of the probit analysis for the construction industry in Dallas metropolitan area.

Table 33. Business Formation Probability Differentials for Selected Groups Relative to White Men Construction-Related Services, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-3.85%***
Latino	3.15%***
Native American	-3.84%**
Asian/Pacific Islander	1.61%***
Other	(omitted)‡
White Women	-3.57%***

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

** indicates statistical significance at the 0.01 level

‡ There were not any observations in this category among the self-employed and thus this variable was dropped from the analysis

The analysis indicates that compared to White men, Blacks, Latinos, Native Americans, Asian/Pacific Islanders, and White women in Dallas metropolitan area are less likely to form construction-related services businesses after controlling for key factors. The reduction in probability ranges from 1.61% less to 3.85% less. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 34 presents the findings from the wage and salary income regression analysis examining the construction-related services industry in Dallas metropolitan area. This indicates the wage differential for selected demographic groups in Dallas metropolitan area relative to White men.

**Table 34. Wage Differentials for Selected Groups Relative to White Men
Construction-Related Services, 2010-2012**

Independent Variable	Coefficient
Black	-12.5%
Latino	-12.5%
Native American	-47.4%
Asian/Pacific Islander	-29.0%**
Other	(omitted)‡
White Women	-28.9%***

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

** indicates statistical significance at the 0.01 level

‡ There were not any observations in this category among the self-employed and thus this variable was dropped from the analysis

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, White women, Asian/Pacific Islanders and Others in Dallas metropolitan area earn less than White men in the construction-related services industry. The differential ranges between 12.5% less and 47.4% less. Only the estimated coefficients for Asian/Pacific Islander and White Women are statistically significant.

c. Differences in Business Earnings

The same approach was used to investigate if there were differences in business earnings received by Non-White male entrepreneurs and White male entrepreneurs. Using the PUMS, we limited the sample to the self-employed and examined how their business income varied in response to factors such as race, gender, age, education, and industry. Table 35 presents these findings.

**Table 35. Business Earnings Differentials for Selected Groups Relative to White Men
Construction-Related Services, 2010-2012**

Independent Variable	Coefficient
Black	(omitted)‡
Latino	-20.9%

Native American	182.0%
Asian/Pacific Islander	-144.0%
Other	(omitted) [‡]
White Women	37.0%

‡ There were not any observations in this category among the self-employed and thus this variable was dropped from the analysis

None of the estimated coefficients were statistically significant.

d. Conclusion

Using descriptive analysis, Table 36 shows that differentials exist between the business formation rates by Non-White males and White males. Table 37 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Table 36 presents data indicating differentials in wage and business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect Non-Whites and White women entrepreneurs.

5. The Services Industry in Dallas metropolitan area

a. Business Formation Rates

Table 25 presents business formation rates in the services industry in Dallas metropolitan area for selected demographic groups.

**Table 36. Business Formation Rates
Services, 2010-2012**

Demographic Group	Business Formation Rates
Black	5.38%
Latino	6.80%
Native American	13.64%
Asian/Pacific Islander	9.52%
Other	11.86%
Non-White	6.81%
White Women	10.10%
Non-White Male	8.27%
White Male	14.52%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-White males. However, as with the issue of income and earnings differences, the higher rates could be attributed to factors aside from race and/or gender. To explore this question further, a probit regression statistical technique was employed. The

basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 37 presents the results of the probit analysis for the services industry in Dallas metropolitan area.

Table 37. Business Formation Probability Differentials for Selected Groups Relative to White Men Services, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-3.25%***
Latino	-2.03%***
Native American	-0.15%
Asian/Pacific Islander	-0.75%***
Other	-0.48%
White Women	-1.60%***

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

The analysis indicates that compared to White men, Non-Whites and White women in Dallas metropolitan area are less likely to form services businesses even after controlling for key factors. The reduction in probability ranges from 0.15% less to 3.25% less. The estimates for Black, Latino, Asian/Pacific Islander, and White Women are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 38 presents the findings from the wage and salary income regression analysis examining the services industry in Dallas metropolitan area. This indicates the wage differential for selected demographic groups in Dallas metropolitan area relative to White men.

Table 38. Wage Differentials for Selected Groups Relative to White Men Services, 2010-2012

Independent Variable	Coefficient
Black	-31.5%***
Latino	-13.4%***
Native American	-25.0%**
Asian/Pacific Islander	-31.1%***
Other	-23.5%*
White Women	-27.5%***

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

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, White women, Asian/Pacific Islanders and Others in Dallas metropolitan area earn less than White men in the Services industry. The differential ranges between 13.4% less and 31.5% less. Estimates of the coefficients for Black, Latino, Asian/Pacific Islander, and White Women are statistically significant at the 0.001 level.

c. Differences in Business Earnings

The same approach was used to investigate if there were differences in business earnings received by Non-White male entrepreneurs and White male entrepreneurs. Using the PUMS, we limited the sample to the self-employed and examined how their business income varied in response to factors such as race, gender, age, education, and industry. Table 39 presents these findings.

Table 39. Business Earnings Differentials for Selected Groups Relative to White Men Services, 2010-2012

Independent Variable	Coefficient
Black	-54.4%***
Latino	-22.4%*
Native American	-70.8%
Asian/Pacific Islander	-22.9%
Other	-264.0%***
White Women	-75.7%***

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

Blacks, Latinos, Native Americans, Asian/Pacific Islanders, Others, and White women all receive business earnings less than White men in the Services industry. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from 22.4% less to 264.0% less. The estimates of the coefficients for Black, Other, and White Women were found to be statistically significant at the 0.001 level.

d. Conclusion

Using descriptive analysis, Table 40 shows that differentials exist between the business formation rates by Non-White males and White males. Table 41 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists.

Tables 40 and 41 present data indicating differentials in wage and business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect Non-Whites and White women entrepreneurs.

6. The Goods Industry in Dallas metropolitan area

a. Business Formation Rates

Table 29 presents business formation rates in the goods industry in Dallas metropolitan area for selected demographic groups.

**Table 40. Business Formation Rates,
Goods, 2010-2012**

Demographic Group	Business Formation Rates
Black	4.23%
Latino	4.49%
Native American	13.89% [‡]
Asian/Pacific Islander	14.20%
Other	0.00% [‡]
Non-White	6.00%
White Women	6.07%
Non-White Male	6.03%
White Male	9.08%

Source: CHA calculations from the American Community Survey

[‡] The number of observations in this demographic group was too small for a reliable statistical analysis

White males have a higher rate of business formation than Non-Whites and White women except for Native Americans and Asian/Pacific Islanders. Note: the observed number of Native American and Other was too small for any reliable statistical analysis. However, as with the issue of income and earnings differences, the higher rates could be attributed to factors aside from race and/or gender. To explore this question further, a probit regression statistical technique was employed. The basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 41 presents the results of the probit analysis for the goods industry in Dallas metropolitan area.

**Table 41. Business Formation Probability
Differentials for Selected Groups Relative to White Men
Goods, 2010-2012**

Demographic Group	Probability of Forming a Business Relative to White Man
Black	-0.83%***
Latino	0.05%
Native American	1.52%
Asian/Pacific Islander	4.63%***
Other	(omitted) [‡]
White Women	-0.89%***

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

‡ There were not any observations in this category among the self-employed and thus this variable was dropped from the analysis

The analysis indicates that Blacks and White women in Dallas metropolitan area are less likely to form goods businesses compared to White men even after controlling for key factors. However, Asian/Pacific Islanders were more likely to form businesses in this industry relative to White men. These estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 42 presents the findings from the wage and salary income regression analysis examining the goods industry in Dallas metropolitan area. This indicates the wage differential for selected demographic groups in Dallas metropolitan area relative to White men.

**Table 42. Wage Differentials for Selected Groups
Relative to White Men
Goods, 2010-2012**

Independent Variable	Coefficient
Black	-35.7%***
Latino	-25.8%***
Native American	-3.7%
Asian/Pacific Islander	-47.0%***
Other	-24.3%
White Women	-42.6%***

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, Native Americans, White women, Asian/Pacific Islanders and Others in Dallas metropolitan area earn less than White men in the goods

industry. The differential ranges between 3.7% less and 47.0% less. Estimates of the coefficients for Black, Latino, Asian/Pacific Islander, Other, and White Women are statistically significant at the 0.001 level.

c. Differences in Business Earnings

The same approach was used to investigate if there were differences in business earnings received by Non-White male entrepreneurs and White male entrepreneurs. Using the PUMS, we limited the sample to the self-employed and examined how their business income varied in response to factors such as race, gender, age, education, and industry. Table 43 presents these findings.

Table 43. Business Earnings Differentials for Selected Groups Relative to White Men Goods, 2010-2012

Independent Variable	Coefficient
Black	-82.2%
Latino	-43.9%
Native American	84.4%
Asian/Pacific Islander	-26.7%
Other	(omitted) [‡]
White Women	-90.5%**

Source: CHA calculations from the American Community Survey

** Indicates statistical significance at the 0.01 level

‡ There were not any observations in this category among the self-employed and thus this variable was dropped from the analysis

With the exception of the estimated coefficient for Native American, the estimates of the coefficients for these variables indicated that these groups received fewer business earnings than White men. These differentials ranged from 26.7% less to 90.5% less. The coefficient for White Women was found to be statistically significant at the 0.01 level.

d. Conclusion

Using descriptive analysis, Table 43 shows that differentials exist between the business formation rates by Non-Whites and White women and White males. Table 44 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 43 and 44 present data indicating differentials in wage and business earnings after controlling for possible explanatory factors. These analyses support the conclusion that barriers to business success do affect Non-Whites and White women entrepreneurs.

VI. QUALITATIVE EVIDENCE OF RACE AND GENDER DISPARITIES IN PHHS' MARKET

In addition to quantitative data, a disparity study should further explore anecdotal evidence of experiences with discrimination in contracting opportunities because it is relevant to the question of whether observed quantitative 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.”¹⁵⁶ Evidence about discriminatory practices engaged in by prime contractors, bonding companies, suppliers, lenders 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.¹⁵⁷ 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.”¹⁵⁸ “[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.”¹⁵⁹

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.”¹⁶⁰ 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.”¹⁶¹

¹⁵⁶ *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

¹⁵⁷ *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1168-1172 (10th Cir. 2000), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941 (2001).

¹⁵⁸ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 1520, 1530 (“*Concrete Works IV*”), *cert. denied*, 540 U.S. 1027 (2003) (10th Cir. 2003).

¹⁵⁹ *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 926 (11th Cir. 1997).

¹⁶⁰ *Id.* at 249.

¹⁶¹ *Concrete Works IV*, 321 F.3d at 989.

To explore this type of anecdotal evidence of possible discrimination against minorities and women in PHHS' geographic and industry markets, we conducted four group interviews, totaling 62 participants. We met with business owners from a broad cross section of the industries from which Parkland purchases. Firms ranged in size from large national businesses to decades-old family-owned firms to new start-ups. Owners' backgrounds included individuals with decades of experience in their fields and entrepreneurs beginning their careers. We sought to explore their experiences in seeking and performing public and private sector prime contracts and subcontracts, both with state agencies and in the private sector. We also elicited recommendations for improvements to the M/WBE Program, as discussed in Chapter III.

Many M/WBE participants reported that while some progress has been made in integrating their firms into public and private sector contracting activities through race- and gender-conscious contracting programs, significant barriers remain.

As discussed in Chapter II, this type of anecdotal data has been held by the courts to be relevant and probative of whether PHHS continues to have a need to use narrowly tailored M/WBE contract goals to remedy the effects of past and current discrimination, and create a level playing field for contract opportunities for all firms.

The following are summaries of the issues discussed. Quotations are indented, and have been edited for readability. They are representative of the views expressed by participants over the many sessions.

A. Access to Business and Professional Networks

Minorities and women reported that it remains difficult for them to access the networks and relationships necessary for entrepreneurial success.

I'm a big, big believer that you have to deal with the end user.

If you can kind of break into a network it's amazing how fast things happen. And I don't know if that's good or bad, but that's just the way things are.

[Larger white male-owned firms are] going to go and use the same company [with which they usually do business].

When the CIO has the preference of a certain company they are going to use their company for either convenience reason or for preference reason.

[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.

[There are] a lot of Hispanic-owned companies but the person that's the go between between the Hispanic-owned company and the general contractor is Anglo.

I was at a dinner the other day. I was the only minority. And after the business ... there was this circle of five people had been working together way back when. And they're now at their fifth job of when they started, fourth or fifth. They keep putting each other in. So you got fired there but I'll bring you on over here and you bring [someone else]. Well, they keep getting experience. You pick up their resume and how is Jose going to get into the middle of that? You'll never get the experience.... Once the bid is publicized, it's that, over drinks what I tell you. That's the valuable [information]. We're not in those networks.

[Anglos] don't know us, they don't go out to lunch with us, they don't have drinks with us.

This was true for many participants not only about networks of other business owners and professional associations but also about agency staff.

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].

On a [large County contract there were] two companies in the room. Both were very friendly, had been out drinking with the staff, a sports event. They were in a happy, happy mood. And, here I am a minority woman and these White guys and they were having a conversation and the bid meeting started twenty minutes late.

[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 CIO and no one has responded at all.

B. Discriminatory Attitudes and Negative Perceptions of Competence

Many minority and women owners reported they are stigmatized by their race and/or gender. Other business actors often display negative attitudes about their competency and professionalism. The assumption is that M/WBEs are less qualified and capable, and they are held to higher performance standards.

[Agency staff and prime vendors are] looking down at you because you're a woman, you probably didn't know IT.

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.

The day of Whites only, keep out, those are gone. There's subtleties. Oh, we really like this [White] guy. It just works smoother with this guy.

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. You see, when it's a large white firm you run the person off who committed the problem. When it's a minority firm you want to run the firm off.

C. Obtaining Work on an Equal Basis

These types of barriers lead minorities and women to unanimous agreement that goals remain necessary to level the playing field and equalize opportunities. M/WBEs sought the right to compete on a fair and equal basis. Without goals, they believed they would be shut out of Parkland's contracts.

[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.

If it's not a project that has a goal, they're not bringing you to the table.

[Prime vendors] see the goal as the ceiling, not as the floor.

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 exclude me.

[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].

I think the goals are important.

If [prime vendors] think that 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.

The goals maybe had you taking some steps that you wouldn't have taken otherwise. Now that you have, you've identified some great suppliers. And you continue doing business with them. But do you look for more?

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.

Some owners felt that prime contractors were not comfortable with minorities taking larger roles.

Do we really want to play this game 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].

Even M/WBEs who had accessed larger public projects through M/WBE programs reported that the relationships with prime contractors did not translate into private sector work.

[A general contractor, which this MBE had worked on major public 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. Yea 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.... It should have been, oh okay, I know you do this, hey, come on over. Let's make sure you can meet the budget. Let's go. But his first reaction was, there's no MWBE goals. This is private. What? You've met my wife. I met your kids. You met my kids.

Prime contract opportunities were especially difficult for M/WBEs to obtain on a fair basis.

Unless we team up with the large non-minority firm we are not getting that work even though we can do the work.

These programs are not subcontracting programs.

The minority firms are never looked at as a real viable prime contracting opportunity.

[Agency staff] make an assumption that we can't handle the business.... It's almost dismissive. Like you go be a subcontractor.

One suggested approach to increasing M/WBEs' opportunities and capacities would be a formal Mentor-Protégé program.

I'm hearing a lot of positive feedback on mentor-protégé [initiatives]. Because if you write a really good mentor-protégé agreement and you have a great mentor, you can really learn a lot. And not just win a project but really a good mentor helps you with a lot of things that have nothing to do with that specific project but with your business. Help you with your safety plan and your quality control plans and your, help training your, you know, whatever staff you have. Not just, again for that pursuit, but for your whole business.

Come out with a mentoring program that's goal oriented and visible.

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 been 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.

Some general contractors provide informal supportive services to M/WBE subcontractors and would like credit for these efforts.

Credit should be given to firms who help those small businesses build capacity.

Another possibility would be to encourage joint ventures between M/WBEs and non-M/WBEs, although negative experiences with the arrangement in the Dallas area gave some interviewees concern.

I have some experience with JVs and mentor-protégé [relationship]s and they work but it depends on A, who you're partnering with. It's just like with anything. A JV is like a marriage. And you need to look at the prime very closely in terms of a lot of things. Because I have seen and I've gotten a lot of feedback from JVs that just don't work.

Our challenge [with acting as a 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].

It sounds good that you're on a 500 million dollar joint venture. But at the end of the day, if you're not making any money on it ... it doesn't serve a good purpose. Now, joint ventures are good in certain aspects of it. Joint ventures are teaming where the small MBE can actually have an opportunity to maybe get on the management team but also have an opportunity to self-perform work where they can actually grow their business but to built capacity in that business then that's great. So, when agencies look at, oh we got to have a joint venture partner, you got to look at if that's really the benefit of the MWBE or if it just looks good on paper..... How many people are they going to have on the team? What are their roles and responsibility? Are they just doing document control or administrative stuff or if they really have an opportunity. Maybe they're not necessarily supervising the construction of the whole project but are they in a position that their people can be trained and taught and have a significant role in the construction of that project?

A third suggestion was to set aside some smaller contracts for bidding only by small firms on a race- and gender-neutral basis.

[There should be contracts from which] the big boys should be completely excluded.

If you're a small business and you're not even getting in the door it doesn't make a difference whether you're a woman or a man, you're not getting in the door.

D. Conclusion

Consistent with other evidence reported in this Study, anecdotal interview information strongly suggests that minorities and women continue to suffer discriminatory barriers to full and fair access to Parkland, other government and private sector contracts and subcontracts. While not definitive proof that PHHS may apply race- and gender-conscious measures to these impediments, the results of the personal interviews are the types of evidence that, especially when considered alongside the numerous pieces of statistical evidence assembled, the courts have found to be highly probative of whether PHHS may continue to use race- and gender-conscious remedies to address that discrimination.

VII. RECOMMENDATIONS FOR PHHS' MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM

The quantitative and qualitative data in this study provide a thorough examination of the evidence regarding the experiences of minority- and women-owned firms in Parkland's geographic and industry markets. As required by strict scrutiny, we analyzed evidence of such firms' utilization by PHHS as measured by dollars spent, as well as M/WBEs' experiences in obtaining contracts in the public and private sectors. We gathered statistical and anecdotal data to provide the agency with the evidence necessary to determine whether there is a strong basis in evidence for the continued use of race- and gender-conscious goals, and if so, how to narrowly tailor its M/WBE program. Based upon the results, we make the following recommendations.

A. Augment Race- and Gender-Neutral Initiatives

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 PHHS' remedial purposes. Increased participation by M/WBEs through race-neutral measures will also reduce the need to set M/WBE contract goals. We therefore suggest the following enhancements of PHHS' current efforts, based on the business owner interviews, the input of agency staff, and national best practices for M/WBE programs.

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 subcontractor records. As is very common, Parkland did not have all the information needed for the inclusion of subcontractor payments in the analysis. While PHHS has purchased a system, it was not able to generate data for the Study period. The lack of a system also makes it more difficult to monitor, enforce and review the program. It further means outreach is not automated and convenient as these efforts could be.

We recommend PHHS implement an electronic data collection system for the M/WBE program with at least the following functionality:

- Full contact information for all firms, including email addresses, NAICS codes, race and gender ownership, and small business certification status.
- Contract/project-specific goal setting, using the data from this Study.

- Utilization plan capture for prime contractor's 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; verification of prompt payments to subcontractors; and information sharing between PHHS, prime vendors and subcontractors about the status of pay applications.
- Spend analysis of informal expenditures, such as those made with agency credit cards or on purchase orders, to determine the utilization of certified firms.
- Program report generation that provides data on utilization by industries, race, gender, dollar amount, procurement method, etc.
- An integrated email and fax notification and reminder engine to notify users of required actions, including reporting mandates and dates.
- Outreach tools for eBlasts and related communications and event management for tracking registration and attendance.
- Import/export integration with existing systems to exchange contract, payment, and vendor data.
- Access by authorized PHHS staff, prime contractors and subcontractors to perform all necessary activities.

2. Focus on Reducing Barriers to M/WBE Prime Contract Awards

Parkland currently has made some informal strides towards unbundling contracts to facilitate in prime contract awards to M/WBEs. We suggest Parkland develop contract specifications with an eye towards unbundling projects into less complex scopes and lower dollar values. For example, contracts might be dividend into those for the main hospital campus and those for the Community Oriented Primary Care Clinics.

Experience requirements should be reviewed with an eye towards reducing them to the lowest level necessary to ensure the bidder has adequate experience, perhaps by recognizing similar though no identical types of work, including for private sector clients.

We further suggested reviewing surety bonding and insurance requirements so they are no greater than necessary to protect its interests. These are possible barriers to contracting by small firms that have been mentioned by the courts as

areas to be considered. Steps might include reducing or eliminating insurance requirements on smaller contracts and removing the cost of the surety bonds from the calculation of lowest apparent bidder on appropriate solicitations.

3. Ensure Bidder Non-Discrimination and Fairly Priced Subcontractor Quotations

We recommend PHHS require bidders to maintain all subcontractor quotes received on larger projects. At PHHS' discretion, the prices and scopes can then be compared to ensure that bidders are in fact soliciting and contracting with subcontractors on a non-discriminatory basis and that M/WBEs are not inflating quotes. This approach was part of the Illinois Department of Transportation's DBE plan that was specifically approved by the court: "IDOT requires contractors seeking prequalification to maintain and produce solicitation records on all projects... Such evidence will assist IDOT in investigating and evaluating discrimination complaints."¹⁶²

4. Increase Pre-Award Efforts

Parkland's current practice is to advertise for bids or proposals only 14 calendar days prior to the submission deadline. This is an extremely short time period, and both vendors and PHHS staff described this approach and a lack of access to information about specific opportunities as barriers to participation. We recommend lengthening solicitation times for larger contracts to a minimum of 30 calendar days to allow the development of teams and subcontracting arrangements to meet contract goals. We further suggest conducting outreach events on upcoming opportunities before the solicitation is advertised as an informational session. PHHS should also hold pre-bid conferences for contracts with goals and then post a list of interested prime vendors to facilitate M/WBEs' efforts to market themselves to prime vendors.

Parkland should set up a procurement assistance hotline, where potential vendors can receive individual help with paperwork and other requirements. The often specialized nature of health care procurements makes this especially useful for this agency.

5. Revise Contract Retainage Procedures

Many firms mentioned rereleasing retainage on a rolling basis as a race-neutral measure that would assist all firms doing business with Parkland. Rolling release is a common agency practice that balances the government's need to ensure that work is correctly completed with the vendor's need for payment as work is performed.

¹⁶² *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868, at * 87 (Sept. 8, 2005).

6. Conduct Additional Networking and Training Events

The Study found that M/WBEs are receiving few opportunities in several industry codes. We suggest that special outreach be conducted to firms in those sectors so that they are aware of opportunities and can make connections with other vendors as subcontractors or joint venture partners. Activities could include targeted emails about future contracts, matchmaking events for M/WBES, prime vendors and Parkland staff focusing on those industries.

7. Adopt a Small Business Enterprise Program Element

An effective approach would be to set aside some smaller contracts for bidding only by small, local firms as prime contractors. If implemented on a fully race- and gender-neutral basis, this is a constitutionally acceptable method to increase opportunities for all small firms. Small Business Enterprise (“SBE”) setasides are especially useful for those industries that do not operate on a prime vendor-subcontractor model, such as health care and consulting services. It will reduce the need to set contract goals to ensure equal opportunities, and is an approach specifically approved by the courts.

Many small firms, both M/WBEs and non-M/WBEs, endorsed this initiative. PHHS would have to determine the size limits for contracts (such as contracts under \$500,000) and the types of contracts to be included (such as only single scope jobs or lower dollar value multiple scope projects). For example, maintenance contracts might be successfully procured using this method. It will be critical to keep complete race and gender information on bidders to evaluate whether this is an effective race- and gender-neutral measure to reduce barriers.

A SBE element could also include additional assistance for SBE and M/WBE vendors, such as waiving the vendor registration fee; quick pay (*e.g.*, invoicing every two weeks); reduced experience requirements; no holding of retainage, etc.

8. Consider Partnering with Other Agencies to Implement Bonding, and Financing and Technical Assistance Programs

Both M/WBEs and majority-male owners supported services to assist M/WBEs to increase their skills and capabilities. To address this critical need, PHHS should consider partnering with other entities. This could include at a minimum serving as an information source or clearinghouse about agencies or organizations that provide services; providing logistical and financial support to specific programs targeted to the industries in which PHHS purchases would be ideal. Dallas/Fort Worth International Airport has several programs, and we suggest Parkland explore partnering with the Airport and others to provide this type of assistance to M/WBEs.

9. Develop a Mentor-Protégé Program

We suggest the creation of Mentor-Protégé program, whereby mentors would receive credit towards meeting M/WBE contract goals and protégés would receive support to increase their experience and capacities. Such an initiative will require standards for participation, how credit will be given for utilization of the protégé, reimbursable expenses, program monitoring, and measures for program success. Elements should include:

- Formal program guidelines.
- A PHHS-approved written development plan, which clearly sets forth the objectives of the parties and their respective roles, the duration of the arrangement, a schedule for meetings and development of plans, and the services and resources to be provided by the mentor to the protégé. The development targets should be quantifiable and verifiable, and reflect objectives to increase the protégé's capacities and expand its business areas and expertise. Targets for improvement must be specified, such as increased bonding capacity, increased sales, increased areas of work specialty, etc.
- A long term and specific commitment between the parties, *e.g.*, 12 to 36 months.
- Extra credit for the mentor's use of the protégé to meet a contract goal (*e.g.*, 1.25 percent for each dollar spent).
- A fee schedule to cover the direct and indirect cost for services provided by the mentor for specific training and assistance to the protégé.
- Regular review by PHHS of compliance with the plan and progress towards meeting its objectives. Failure to adhere to the terms of the plan would be grounds for termination from the Program.

10. Appoint an M/WBE Advisory Group

While Parkland's Public Works staff meets regularly with some industry groups, we suggest the appointment of an advisory group for the program. There was support from business owners for this approach, so long as it includes substantive input into program design and administration. Membership could be composed of PHHS representatives with responsibility for contracting and program implementation; representatives from industry groups and Individual business owners. Its charge could encompass issues such as contact goal setting, good faith efforts administration, contract performance monitoring and business development. While strictly advisory in nature, the group could be a valuable source of ideas and information and provide a regular channel for

communication between various stakeholders and Parkland. A quarterly meeting schedule was suggested, where Program issues and updates would be explained and discussed.

B. Implement Narrowly Tailored Race- and Gender-Conscious Measures

1. Adopt a Formal M/WBE Program Policy

PHHS currently embodies its program in a variety of documents, but there is no formal, overarching policy that contains the elements necessary for a program, such as whether there are annual, overall goals for M/WBE participation (there is no legal requirement that there be such targets); which groups are eligible as well as standards for owner economic disadvantage and firms size; how to set contract-specific goals; counting M/WBE participation towards contract goals; demonstrating a bidder's good faith efforts to meet contract goals; substitution of certified firms during contract performance; monitoring compliance with contractual commitments; sanctions for non-compliance; and mandatory program review. What follows here are recommendations for these program elements.

2. Use the Study to Set M/WBE Contract Goals

As discussed in Chapter II of the study, PHHS' constitutional responsibility is to ensure that its program is narrowly tailored to its geographic and procurement marketplace. The highly detailed availability estimates in the Study can serve as the starting point for contract goal setting. This methodology involves four steps.

1. Weighs the estimated dollar value of the scopes of the contract as determined during the process of creating the solicitation.
2. Determine the availability of M/WBEs in those scopes as estimated in the Study.
3. Calculate a weighted goal based upon the scopes and the availability of firms.
4. Adjust the resulting percentage based on current market conditions and progress towards the annual goals.

It is important to set goals on the entire value of the contract for this level of goal setting, not guess what scopes might be performed by a M/WBEs or limit the application of the remedy to only dollars expected to be spent with subcontractors. While the majority of participation will come through payments to subcontractors, the study found ample evidence that minority and women firms experience even greater barriers to work as prime vendors than as subcontractors.

To support this process, the electronic system should have a goal setting module. In addition, written procedures spelling out the steps and forms documenting the process should be drafted.

Where appropriate, we urge PHHS to bid some contracts that it determines have significant opportunities for M/WBE participation without goals, especially in light of the high participation of some M/WBEs in some industry subsectors during the study period. These “control contracts” can illuminate whether certified firms are used or even solicited in the absence of goals, as suggested by the study data. The development of some unremediated markets data will be probative of whether the programs remain needed to level the playing field for minorities and women.

3. Adopt Narrowly Tailored Eligibility Standards

The case law has evolved significantly since the program was adopted. In addition to the social disadvantage suffered by virtue of membership in a minority group or being female, the courts require that the applicant owner also suffer economic disadvantage, defined by his or her personal net worth; that the firm be small, defined by the applicant’s industry; and that it operate in the agency’s market area. Parkland should therefore consider more narrowly tailoring the criteria for eligibility to participate in the program to meet these strict scrutiny tests. Agencies that have failed to do so have seen their programs struck down, as discussed in Chapter II.

One approach would be to adopt the personal net worth and the size standards in the USDOT DBE program, as these regulations have been upheld by every court and have been relied upon by judges as the model in evaluating non-federal programs. 49 C.F.R. Part 26 applies the size standards of the Small Business Administration,¹⁶³ with a total cap,¹⁶⁴ and a personal net worth test that is indexed annually¹⁶⁵. A gloss on this method is to use these limits as a base, and make adjustments such as an increase or decrease of a set percentage. Alternatively, PHHS could undertake research to set its own limits.

In any event, PHHS should only accept certifications from agencies that apply these three, independent criteria: the owner must be socially disadvantaged, the owner must be economically disadvantaged as evidenced by a personal net worth limit; and firm must be small.

¹⁶³ 13 C.F.R. Part 121.

¹⁶⁴ 49 C.F.R. § 26.65(b).

¹⁶⁵ The current limit is \$1.32 million, exclusive of the owner’s interest in the applicant and his or her primary residence.

4. Revise Program Administration Elements

a. Review Procedures for Determining Compliance at Bid Submission

We make several recommendations to enhance and strengthen policies for the consideration of whether a bidder has complied with the program before contract award. Revisions could be conducted in conjunction with the process of implementing an electronic system.

We suggest providing with the invitation for bid the scopes of work used by PHHS to set the contract goal. This would provide guidance to prime firms on specialties on which to concentrate for making good faith efforts, as well as increase transparency about how the program operates. It will be necessary to stress that firms may meet the goal using firms outside these industries and that only soliciting firms in these identified industries does not *per se* constitute making good faith efforts to meet the goal.

Compliance with M/WBE requirements must be a material element of responsiveness and performance. Further, evaluation teams should include M/WBE staff, so that compliance with program is afforded the same degree of importance as other elements of responsiveness and responsibility.

i. Good Faith Efforts

It will facilitate prime vendors' ability to make good faith efforts to include M/WBEs if the bidders are required to register their interest in order in an invitation for bids or a request for proposals or qualifications to be considered responsive so that M/WBEs could know whom to contact about possible subcontracting or partnering arrangements.

Prime contractors suggested that the policy to establish their good faith efforts to meet a goal and thereby seek a full or partial goal waiver be more specific and more widely disseminated. This type of flexibility is critical to a determination that the program remains narrowly tailored. Moreover, to the extent prime vendors believe waivers are not possible, it may reduce the number of bids or proposals submitted, thereby reducing competition for Parkland work.

The current practice of permitting construction bidders to submit evidence of good faith efforts after submission should be replaced with a stronger approach that requires either meeting goals or submitting good faith efforts documentation at the time of submission. Paperwork evidencing compliance can be submitted during a very short window after submissions (*e.g.*, one business day). Meeting compliance requirements should be treated like every other material element of the bid package, not as an after the fact submission after the apparent low bidder is determined. This makes it clear that diversity is a core objective of the agency and that bidders must comply to receive PHHS contracts.

Parkland should revise the policy that permits a professional services firm not to make good faith efforts because it provides assurance that it usually performs the type of work of the solicitation with its own work force and does not utilize subcontractors. We urge PHHS to follow national best practices, including the USDOT DBE program regulations,¹⁶⁶ that do not relieve a bidder of the requirement to make good faith efforts merely because it is its usual practice to self perform the work. All bidders should be required to make good faith efforts to meet the narrowly tailored contract goals. Failure to do so should render the firm ineligible for award, regardless of any explanation for its failure.

ii. Clarify Rules for Counting Subcontractor Participation

We recommend PHHS count second and lower tier M/WBE participation. Limiting participation to only first tier subcontractors makes it more difficult for prime contractors to meet goals and may deprive some M/WBEs of the chance to work on PHHA projects in smaller scopes not bid directly to the prime contractor. A comprehensive data collection system will permit such utilization to be tracked appropriately.

Next, there should be specific language regarding how to count dollars paid to suppliers, regular dealers and manufacturers, and when credit is earned (only upon receipt of payment by the M/WBE). The counting provisions of the USDOT DBE program regulations are an excellent model.¹⁶⁷

b. Conduct Compliance Monitoring

PHHS should develop written policies and procedures for contract compliance monitoring during performance, including commercially useful function determinations, subcontractor substitutions and sanctions for non-compliance.

Monitoring standards and processes are critical to ensure compliance and program integrity, as well as to facilitate accurate and timely reporting. Failure of a vendor to make good faith efforts to meet its contractual commitments during contract performance should be treated like other failures to meet expectations and obligations. While it is imperative that the goals never operate as quotas, and circumstances often change during contract performance, insufficient monitoring and enforcement undermine the effectiveness of the program.

The lack of staff and electronic resources has meant that Parkland has not been able to monitor contractors' compliance with contractual commitments. Further, there are no consequences for not meeting contractual commitments.

We strongly urge that additional staff be hired and trained and that the electronic system described above be implemented as soon as possible. Monitoring will

¹⁶⁶ See Appendix A, § IV.C. to 49 C.F.R. Part 26.

¹⁶⁷ See 49 C.F.R. § 26.55 ("How is DBE participation counted toward goals?").

ensure that contractual obligations are met and that M/WBEs that are listed are actually used to the extent described in the compliance documents. It will also ensure that subcontractors— without regard to race or gender— are paid. Business Diversity should have the authority to stop the process of a vendor is out of compliance, which is not possible under the current system.

The present program requires that firms report only subcontractor utilization that exceeds 20 percent of the cost of the contract. We urge PHHS to require reporting of all subcontractor and supplier payments, regardless of size over some *de minimis* amount (*e.g.*, \$1000.00) and whether the firm is a M/WBE. The lack of such records was not only a major obstacle to the conduct of the Report but also means that Parkland does not have a complete picture of the utilization of M/WBEs as compared to other firms. This highly unusual restriction serves no purpose, and the additional administrative burdens will be greatly eased by the use of the electronic data collection system.

It is also a critical best practice to conduct site visits to ensure that what is submitted matches what is occurring on the ground. The M/WBE Office should supervise this process, which could be performed in many cases by the project manager already assigned to the contract. Making user departments partners in this effort will be crucial to augmenting current efforts.

4. Conduct Training for all PHHS Staff with Contracting Responsibilities or Vendor Interface

These significant changes will require PHHS-wide roll out of the new elements as well as training of all PHHS personnel with responsibility for the program and vendor management. In addition to providing technical information on compliance, it is also an opportunity to reaffirm Parkland's commitment to supplier diversity and the program, and encourage all departments to buy into the values and objectives of the program.

5. Consider Revising the Board Approval Process and Contract Thresholds to Reduce Burdens on Small Firms' Participation and Cash Flow

PHHS' current process requires Board approval for contracts over \$200,000. This low ceiling leads to significant delays in the issuance of the notice to proceed to the successful bidder, as the award must be deferred until the Board's next meeting or even postponed a month or more. Firms must set aside money to mobilize and configure staff to be ready to begin work when Parkland's Board finally approves the award. Waiting for such an extended period of time is a barrier to participation by small firms and M/WBEs who need to maintain cash flow, and discourages them from submitting bids in the first place. We therefore

recommend the limit be raised so that firms can start work and receive cash flow as soon as possible.

C. Develop Performance Measures for Program Success

PHHS should develop quantitative performance measures for M/WBEs and overall success of the program to evaluate its effectiveness in reducing the systemic barriers identified by the study. In addition to meeting the overall, annual goal, possible benchmarks might be:

- The number of bids or proposals and the dollar amount of the awards and the goal shortfall where the bidder submitted good faith efforts to meet the contract goal;
- The number and dollar amount of bids or proposals rejected as non-responsive for failure to make good faith efforts to meet the goal;
- The number, type and dollar amount of M/WBE substitutions during contract performance;
- Increased bidding by certified firms;
- Increased prime contract awards to certified firms;
- Increased “capacity” of certified firms as measured by bonding limits, size of jobs, profitability, etc.; and
- Increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts.

D. Conduct Regular Program Reviews

The program policy must include a date when it will “sunset” unless specifically reauthorized. This is a necessary means to meet the narrow tailoring test that race- and gender-conscious measures be used only when necessary. Data should be reviewed approximately every five to six years, to evaluate whether race- and gender-based barriers have been reduced such that affirmative efforts are no longer needed, and if such measures are necessary, to ensure that they remain narrowly tailored.

APPENDIX A: MASTER D/M/W/BE DIRECTORY

To supplement race and sex information in Dun & Bradstreet/Hoovers used to estimate M/W/DBE availability in PHHS' market area, we identified 119 organizations that might have lists of minority, women and disadvantaged firms. We included national entities and organizations from neighboring states because of the possibility that firms on these lists might be doing business with Parkland. These lists were used to supplement data on the race and sex of firms' ownership to improve the accuracy and coverage of race and sex assignments to estimate M/WBE availability.

We obtained lists from the following entities:

- American Indian Chamber of Commerce of Oklahoma
- Arkansas State Highway and Transportation Division
- Business Research Services
- City of Arlington
- City of Austin
- City of Houston
- City of Lafayette
- City of Little Rock
- City of San Antonio
- City of Tulsa
- Diversity Information Resources
- El Paso Hispanic Chamber of Commerce
- Irving Hispanic Chamber of Commerce
- New Orleans International Airport DBE Office
- North Central Texas Regional Certification Agency
- Oklahoma Consortium for Minority Business Development
- Small Business Administration
- South Central Texas Regional Certification Agency
- State of Texas HUB
- Texas DOT
- Women's Business Council Southwest
- Parkland Health & Hospital System

The following entities had relevant lists of MWDBEs that were duplicates of the lists we obtained:

Austin-Bergstrom Airport
City of Dallas
City of Fayetteville, AR
City of Ft. Worth M/WBE Office
City of Irving
Dallas / Ft. Worth Int'l Airport Procurement Office
Dallas Area Rapid Transit
Dallas County
Dallas County Community College District
Dallas Independent School District
Fort Worth ISD
Houston Airport System
Lewisville, TX Hispanic Chamber of Commerce
MD Anderson Cancer Center Procurement
North Texas Tollway Authority
Oklahoma Minority Supplier Development Council
San Antonio International Airport DBE Program
State of Texas Governors Office
Tarrant County
Tarrant County Water District
Texas Center for Women's Business Enterprise
Texas Department of Commerce
University Health System for Bexar County
University of Texas
University of Texas San Antonio Procurement

The following entities either did not have a list of MWDBEs or the list did not include race and gender information:

Arlington Black Chamber of Commerce
Asian Contractors Association
Austin Independent School District
Business Assistance Center of Fort Worth
Capital City African American Chamber of Commerce
Cen-Tex African American Chamber of Commerce
Cen-Tex Hispanic Chamber of Commerce
City of Shreveport
Corpus Christi Hispanic Chamber of Commerce
Dallas Black Chamber of Commerce

Dallas Black Contractor Association
Dallas Love International Airport
Dallas Regional Chamber
Denton Hispanic Chamber of Commerce
Ft. Worth Hispanic Chamber of Commerce
Garland ISD
Greater Oklahoma City Hispanic Chamber of Commerce
Greater Tulsa Hispanic Chamber of Commerce
Hispanic Chamber of Commerce - Ft. Worth
Irving ISD
North Central Texas Council of Governments
North Texas Small Business Development Center
Oklahoma State University Purchasing
Richardson ISD
San Antonio Independent School District
San Antonio Minority Business Development Center
San Antonio Women's Chamber of Commerce
Texas A&M HUB & Procurement Office
Texas Wide Open for Business
Texas Workforce Commission
Tulsa International Airport
U.S. Women's Chamber of Commerce

We were unable to obtain lists from the following entities:

African Chamber of Commerce DFW
African-American Chamber of Commerce of Shreveport-Bossier
Alamo Asian Chamber of Commerce
American Asian Contractors Association
American Indian Chamber of Commerce of Texas
Arkansas Black Chamber of Commerce
Arkansas Business Enterprise Contractors Association
Arkansas Hispanic Chamber of Commerce
Arkansas State University
Arlington Hispanic Chamber of Commerce
Asia Society of Oklahoma
Asian Chamber of Commerce
Asian Chamber of Commerce of Louisiana
Asian Chamber of Oklahoma
Baton Rouge Metropolitan Airport
Baylor University Supplier Diversity
Bill and Hillary Clinton National Airport

Black Chamber of Commerce of Metro Oklahoma City
Caddo Parish Public Schools
City of Baton Rouge
City of Fort Smith
City of New Orleans
City of Oklahoma City
Corpus Christi Minority Business Development Center
Fort Worth Metropolitan Black Chamber of Commerce
Fort Worth Women's Business Assistance Center
Garland Hispanic Chamber of Commerce
Greater Dallas Hispanic Chamber of Commerce
Greater Dallas Indo-American Chamber of Commerce
Greater Houston Women's Chamber of Commerce
Greater Southwest Black Chamber of Commerce
Greenwood Chamber of Commerce
Hispanic Chamber of Commerce of Louisiana
Houston Hispanic Chamber of Commerce
Lafayette Regional Airport
Little Rock Regional Chamber of Commerce
Louisiana Department of Transportation and Development
Louisiana Minority Supplier Development Council
Loyola University
Minority Business Development Agency Oklahoma
National Association of Women in Construction, Fort Worth
National Association of Women in Construction
New Mexico Department of Transportation
New Orleans Regional Black Chamber of Commerce
Oklahoma City Public Schools
Oklahoma Department of Commerce
Oklahoma DOT
Oklahoma Federation of Business Women
REI Native American Business Centers
REI Women's Business Center
Southeast Louisiana Black Chamber of Commerce
State of Louisiana
State of Oklahoma Purchasing
Tarrant County Asian American Chamber of Commerce
Tarrant County College District
Texas Business Women Inc.
Tulane University
Tulsa Public Schools
University of Louisiana at Lafayette

University of Arkansas
University of Oklahoma
Women's Chamber of Commerce of Texas
Women's Foundation of Arkansas

The following entities declined to provide either their list or the race and gender information in their list:

Alamo City Chamber of Commerce
Austin Hispanic Chamber of Commerce
Carrollton-Farmers Branch Hispanic Chamber of Commerce
Dallas/Ft Worth / Arlington Minority Supplier Development Council
Greater Austin Asian Chamber of Commerce
Greater Dallas Asian American Chamber of Commerce
Greater Grand Prairie Hispanic Chamber of Commerce
Houston Minority Business Council
Regional Hispanic Contractor Association
Southeast Dallas Hispanic Chamber of Commerce
Texas Association of African American Chambers of Commerce
Tri-County Black Chamber of Commerce
U.S. Pan Asian American Chamber of Commerce

APPENDIX B: FURTHER EXPLANATION OF THE MULTIPLE REGRESSION ANALYSIS

As explained in the Report, the 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, education and the state of residence 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. An additional factor was included: because of our interest in the impact of race and gender on wages and earnings, we made the assumption that the impact of those variables might vary from state to state (*i.e.*, the impact of being Black on wages is different in Texas than it is in Alabama). We therefore developed new variables that would show the interaction between race and gender and one particular state. The coefficient for the new variable showed the impact of being a member of that race or gender in Texas. Consequently, the impact of race or gender on wages or earnings had two components: the national coefficient and the state-specific impact.

APPENDIX C: FURTHER EXPLANATION OF THE PROBIT REGRESSION ANALYSIS

Probit regression is a special type of regression analysis. While there are many differences between the underlying estimation techniques used in the probit regression and the standard regression analysis, the main differences from the lay person's point of view lie in the nature of dependent variable and the interpretation of the coefficients associated with the independent variables.

The basic model looks the same:

$$DV = f(D, I, O),$$

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.

In the standard regression model, the dependent variable is continuous and can take on many values, in the probit model, the dependent variable is dichotomous and can take on only two values: zero or one. For instance, in the standard regression analysis, we may be exploring the impact of a change in some independent variable on wages. In this case, the value of one's wage might be any non-negative number. In contrast, in the probit regression analysis, the exploration might be the impact of a change in some independent variable on the probability that some event occurs. For instance, the question might be how an individual's gender impacts the probability of that person forming a business. In this case, the dependent variable has two values: zero, if a business is not formed; one, if a business is formed.

The second significant difference—the interpretation of the independent variables' coefficients—is fairly straight-forward in the standard regression model: the unit change in the independent variable impacts the dependent variable by the amount of the coefficient.¹⁶⁸ However, in the probit model, the initial coefficients cannot be interpreted this way. One additional step --- which can be computed easily by most statistical packages --- 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) occurs. For instance, using our previous example of the impact on 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 final transformation of the coefficient of WOMAN was -0.12, we would interpret this to mean that women have a 12% lower probability of forming a business compared to men.

¹⁶⁸ The exact interpretation depends upon the functional form of the model.

APPENDIX D: SIGNIFICANCE LEVELS

Many tables in this report contain asterisks indicating a number has statistical significance at 0.001 or 0.01 levels 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 whether 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 PHHS as it explores the necessity of intervening in the marketplace through contract goals to ensure it is not a passive participant in the continuation of historic and contemporary bias is do non-Whites and White women receive lower wages than White men? As discussed in Appendix B, 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 this analysis determines that non-Whites receive wages that are 35% 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 is that estimation, that is, what is the probability 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% less than White men). This sometimes called the null hypothesis. We then calculate a confidence interval to find explore the probability that the observed relationship (*e.g.*, - 35%) is between 0 and minus that confidence interval.¹⁶⁹ The confidence interval will vary depending upon the level of confidence (statistical significance) we wish to have in our conclusion. Hence, a statistical significance of 99% would have a broader confidence interval than statistical significance of 95%. Once a confidence interval is established, if -35% lies outside of that interval, we can assert the observed relationship (*e.g.*, 35%) is accurate at the appropriate level of statistical significance.

¹⁶⁹ Because 0 can only be greater than -35%, 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 E: ADDITIONAL DATA FROM THE ANALYSIS OF THE SURVEY OF BUSINESS OWNERS¹⁷⁰

Table E1. Demographic Distribution of Sales and Payroll Data
Construction, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms						
Black	3.5%	0.9%	0.8%	0.8%	1.0%	0.9%
Latino	6.0%	1.8%	3.2%	1.6%	2.6%	2.1%
Native American	0.4%	0.1%	0.2%	0.1%	0.1%	0.1%
Asian	1.0%	0.5%	0.8%	0.5%	0.6%	0.6%
Panel B: Distribution of All Firms						
Non-White	10.9%	3.2%	4.6%	2.9%	4.0%	3.6%
White Women	7.5%	6.5%	9.2%	6.5%	9.3%	8.8%
White Men	66.0%	65.5%	62.8%	65.5%	63.5%	64.6%
Equally Non-white & White	S	S	S	S	S	S
Equally Women & Men	13.0%	7.9%	17.5%	7.0%	9.9%	7.8%
Firms Not Classifiable	2.1%	16.8%	5.8%	18.0%	13.1%	15.0%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

¹⁷⁰ See Footnote 158 for an explanation of the reported value of "S".

Table E2. Demographic Distribution of Sales and Payroll Data – Aggregated Groups
Professional, Scientific, and Technical Services, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms						
Black	4.9%	0.8%	1.3%	0.7%	0.9%	0.7%
Latino	3.2%	0.9%	1.7%	0.8%	1.0%	0.6%
Native American	S	S	S	S	S	S
Asian	5.5%	2.6%	5.1%	2.4%	2.4%	2.4%
Panel B: Distribution of All Firms						
Non-White	14.2%	4.3%	7.8%	3.7%	4.2%	3.7%
White Women	23.0%	6.2%	16.4%	5.1%	6.6%	4.8%
White Men	48.3%	37.3%	57.5%	36.0%	37.8%	36.2%
Equally Non-white & White	1.3%	0.2%	0.4%	0.2%	0.2%	0.1%
Equally Women & Men	10.7%	3.8%	9.7%	3.1%	3.8%	2.4%
Firms Not Classifiable	2.5%	48.3%	8.2%	51.9%	47.4%	52.8%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

Table E3. Demographic Distribution of Sales and Payroll Data – Aggregated Groups Information, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms						
Black	8.0%	1.7%	1.2%	1.7%	0.9%	3.0%
Latino	3.0%	0.2%	0.8%	0.1%	0.2%	0.1%
Native American	S	S	S	S	S	S
Asian	3.8%	0.7%	3.0%	0.6%	0.7%	0.8%
Panel B: Distribution of All Firms						
Non-White	15.1%	2.5%	4.9%	2.4%	1.7%	3.9%
White Women	20.9%	1.2%	14.2%	1.1%	2.5%	1.5%
White Men	46.1%	13.9%	46.0%	13.5%	18.4%	17.4%
Equally Non-white & White	S	S	S	S	S	S
Equally Women & Men	10.5%	0.8%	11.2%	0.7%	1.8%	0.9%
Firms Not Classifiable	6.1%	81.4%	23.1%	82.2%	75.5%	76.2%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

Table E4. Demographic Distribution of Sales and Payroll Data – Aggregated Groups
Services, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms						
Black	12.9%	0.7%	2.1%	0.4%	1.2%	0.6%
Latino	5.6%	1.0%	8.4%	0.8%	S	S
Native American	S	S	S	S	S	S
Asian	5.9%	1.7%	S	S	S	S
Panel B: Distribution of All Firms						
Non-White	24.7%	3.1%	11.8%	2.5%	5.1%	3.3%
White Women	23.1%	3.4%	14.7%	2.7%	6.0%	3.9%
White Men	36.4%	20.9%	44.9%	19.4%	28.9%	24.7%
Equally Non-white & White	S	S	S	S	S	S
Equally Women & Men	10.9%	3.3%	14.6%	2.7%	5.9%	3.8%
Firms Not Classifiable	3.8%	69.0%	13.5%	72.5%	53.8%	64.1%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

Table E5. Demographic Distribution of Sales and Payroll Data – Aggregated Groups
Goods, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000)	Number of Paid Employees	Annual payroll (\$1,000)
Panel A: Distribution of Non-White Firms						
Black	4.1%	0.2%	0.9%	0.2%	0.3%	0.3%
Latino	4.2%	0.5%	2.4%	0.5%	0.8%	0.6%
Native American	S	S	S	S	S	S
Asian	5.8%	1.1%	7.3%	1.0%	1.5%	1.1%
Panel B: Distribution of All Firms						
Non-White	14.3%	1.7%	9.7%	1.7%	2.5%	1.9%
White Women	24.7%	2.6%	12.4%	2.5%	4.2%	3.7%
White Men	38.5%	24.4%	50.1%	24.3%	34.9%	34.2%
Equally Non-white & White	S	S	S	S	S	S
Equally Women & Men	16.6%	2.8%	16.6%	2.6%	5.3%	3.9%
Firms Not Classifiable	4.8%	68.6%	11.4%	68.9%	53.0%	56.3%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

APPENDIX F: ADDITIONAL DATA FROM THE ANALYSIS OF AMERICAN COMMUNITY SURVEY

Table F1. Partial Results from Probit Regression Analysis
All Industries, 2010-2012

Independent Variable	Coefficient
Black	-0.30
Latino	-0.24
Native American	-0.10
Asian/Pacific Islander	-0.02
Other	0.00
White Women	-0.18

Source: CHA calculations from the American Community Survey

Table F2. Partial Results from Probit Regression Analysis
Construction, 2010-2012

Independent Variable	Coefficient
Black	-0.36
Latino	-0.46
Native American	-0.31
Asian/Pacific Islander	-0.32
Other	-0.56
White Women	-0.19

Source: CHA calculations from the American Community Survey

Table F3. Partial Results from Probit Regression Analysis
Services, 2010-2012

Independent Variable	Coefficient
Black	-0.30
Latino	-0.19
Native American	-0.01
Asian/Pacific Islander	-0.07
Other	-0.05
White Women	-0.15

Source: CHA calculations from the American Community Survey

Table F4. Partial Results from Probit Regression Analysis
Goods, 2010-2012

Independent Variable	Coefficient
Black	-0.09
Latino	0.00
Native American	0.17
Asian/Pacific Islander	0.51
Other	0.00
White Women	-0.10

Source: CHA calculations from the American Community Survey

Table F5. Partial Results from Probit Regression Analysis
Construction-Related Services, 2010-2012

Independent Variable	Coefficient
Black	-0.29
Latino	0.24
Native American	-0.29
Asian/Pacific Islander	0.12
Other	0.00
White Women	-0.27

Source: CHA calculations from the American Community Survey