



State of Illinois
Department of Central Management Services
Disparity Study 2015



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I. Executive Summary

Colette Holt & Associates was retained by the State of Illinois Department of Central Management (“CMS”) to perform a study of possible disparities in access to state prime contracting and associated subcontracting opportunities on contracts awarded during state fiscal years 2010 through 2011 on the basis of race and gender. We explored whether Minority-Owned Business Enterprises (“MBEs”) and Female-Owned Business Enterprises (“FBEs”), collectively, “M/FBEs”, have equal access to state contracts, and if not, what remedies might be appropriate to redress the barriers created by race or gender discrimination. This report gathered and analyzed quantitative and qualitative evidence to determine whether there is a disparity between the availability of M/FBEs and the state’s utilization of these firms.

The courts require that a program designed to increase equal opportunities on the basis of race must meet the highest standard of review. “Strict” constitutional scrutiny consists of two tests:

- Does the agency have a “compelling interest” in remedying identified discrimination?
- If so, are the remedies adopted to address that discrimination “narrowly tailored” to the evidence of discrimination?

To meet these elements, the state must consider two types of data:

- Quantitative evidence of disparities between the availability of M/FBEs and their utilization on state contracts.
- Qualitative or anecdotal evidence of firms’ experiences with discrimination in the marketplace.

If the state finds “strong evidence” of the continuing effects of discrimination in its market area, a narrowly tailored program designed to reduce those barriers must use race- and gender-neutral remedies to the maximum feasible extent; set goals closely related to the availability of M/FBEs; be limited to small firms owned by socially and economically disadvantaged individuals; minimize the impact on third parties; and have a limited time period.

A. Study Methodology and Data

This report provides the elements and types of data needed to meet these requirements. The methodology embodies the constitutional principles of *City of Richmond v. Croson*, 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.

The Study addresses the following questions:

- What are the legal standards governing contracting affirmative action programs?
- What are the empirically based geographic and procurement markets in which the state procures goods and services?
- What has been Illinois' utilization of M/FBEs as prime contractors and subcontractors compared to White male-owned firms as prime contractors and subcontractors? What has been the racial, ethnic and gender breakdown of that utilization? In what 6-digit North American Industry Classification ("NAICS") codes do firms operate?
- What is the availability of M/FBEs compared to White male-owned firms in the state's markets?
- Are there disparities between the availability of M/FBEs and their utilization on state contracts? Do any disparities vary based on race, ethnicity or gender, or industry?
- What is the experience of M/FBEs compared to White male-owned firms in the state's markets throughout the wider economy, where affirmative action or diversity goals are rarely employed? Are there disparities in earnings between minorities and women and similar White males? Are there disparities in the rates at which minorities and women form firms compared to similarly situated White males? Are there disparities in the earnings from firms that do form of minorities and women compared to similarly situated White males?
- What have been the actual experiences of minorities and women in seeking prime contracts and subcontracts in the state's markets? What barriers have they encountered, if any, based on race or gender?
- What are the elements of the state's Business Enterprise ("BEP") Program? How is the program administered?
- What has been the experience of M/FBEs and non-M/FBEs in seeking state work? What has been the effect of the M/FBE program? What race- and gender-neutral or small business measures have been helpful? What program aspects could be improved?
- Based on the Study's results, what remedies are appropriate and legally supportable? What measures could be implemented to enhance the program and support inclusion?

To address these questions, we examined quantitative and qualitative evidence.

- We determined whether there is a disparity between the availability of M/FBEs in the state’s markets, and the utilization of these firms, both in the state’s own contracting and throughout the wider economy. Using approved statistical techniques, we also analyzed large Census Bureau databases that provide information on the rates at which M/FBEs form business and their earnings from such businesses compared to similar non-M/FBEs, to shed light on the effects of capacity variables like age of the firm, size, experience, etc. We reviewed existing literature on discrimination in access to business and human capital likely to affect opportunities for M/FBEs in Illinois’ markets.
- We gathered anecdotal data on M/FBEs through focus groups with business owners and community leaders, a public hearing and interviews with state agency staff. We also evaluated the BEP program and race- and gender-neutral policies and procedures for their effectiveness and conformance with constitutional parameters and national standards for M/FBE 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.

B. Study Findings

Overall, we found extensive evidence that discrimination on the basis of race and gender continues to operate in Illinois’ markets and that disparities exist between the availability of M/FBEs and their utilization on state contracts and associated subcontracts, as well as throughout the wider state economy. In our judgment, the state has a strong basis in evidence to continue its M/FBE program and to employ narrowly tailored remedies to ameliorate discrimination.

1. The State’s Industry and Geographic Markets

The courts require that a state or 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 \$4 billion of state spending to empirically determine 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 the state’s activities. Table A presents the distribution of the number of contracts and the amount of contract dollars across all industry sectors. 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	NAICS PCT	CUMULATIVE PCT
524114	Direct Health and Medical Insurance Carriers	49.0%	49.0%
561110	Office Administrative Services	8.6%	57.6%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	8.1%	65.7%
713290	Other Gambling Industries	5.7%	71.4%
621999	All Other Miscellaneous Ambulatory Health Care Services	3.3%	74.7%
561499	All Other Business Support Services	2.7%	77.4%
424690	Other Chemical and Allied Products Merchant Wholesalers	2.6%	80.0%
551112	Offices of Other Holding Companies	2.1%	82.1%
541990	All Other Professional, Scientific, and Technical Services	2.0%	84.0%
811198	All Other Automotive Repair and Maintenance	1.8%	85.8%
541810	Advertising Agencies	1.7%	87.6%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	1.6%	89.2%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	1.4%	90.6%

Source: CHA analysis of state data.

We next determined the locations of firms in these NAICS codes to establish the industries in which the state purchases. The courts require that a state or local government limit the reach of its race- and gender-conscious contracting program for contracts it funds to its market area.

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. Location was determined by ZIP code as listed in the file and aggregated into counties as the geographic unit.

The Final Contract File, unconstrained by geography or product markets, revealed that 7 firms received 43.8 percent of the dollars, all in either health care or the gambling industry.¹ Four of these firms had no Illinois locations. In view of this highly concentrated market, we dropped the four out of state firms from our

¹ These industries were NAICS codes 524114, Direct Health and Medical Insurance Carriers; 561110, Office Administrative Services; 424210, Drugs and Druggists' Sundries Merchant Wholesalers; 524114, Direct Health and Medical Insurance Carriers; 621999, All Other Miscellaneous Ambulatory Health Care Services; 561499, All Other Business Support Services; and 713290, Other Gambling Industries.

analysis so as to give a sharper picture of state contracting in competitive industries.

Spending in Illinois accounted for 88.3% of all contract dollars paid in the product market. Table 4 presents data on how the contract dollars were spent across the state's counties.

Table B: Distribution of Contracts in the State of Illinois' Product Market within Illinois, by County

County	PCT TOTAL DOLLARS
Cook County	57.9%
Champaign County	28.3%
Kane County	5.9%
Sangamon County	2.0%
Dupage County	1.0%
Greene County	0.7%
Williamson County	0.6%
Other Counties	3.5%
TOTAL	100.0%

Source: CHA analysis of state data.

2. The State's Utilization of Minority- and Female-Owned Firms in Its Market Areas

The next step was to determine the dollar value of the state's utilization of M/FBEs in its market areas constrained by geography and industry sector, as measured by payments to prime firms and associated subcontractors and disaggregated by race and gender. Table C groups the NAICS codes into larger sectors to present a snapshot of state spending. Chapter IV provides detailed breakdowns of these results.

Table C: Sector Distribution of Contract Dollars

Sector	Total Contract Dollars	PCT Total Contract Dollars
Construction	\$143,469,153	5.3%
Construction-Related Services	\$33,391,452	1.2%
Goods	\$205,442,278	7.5%
Health Care	\$1,911,376,273	69.9%
Services	\$438,816,817	16.1%
		0.0%
TOTAL	\$2,732,495,973	100.0%

Because the state lacked full records for payments to subcontractors other than firms certified as M/FBEs, 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 Directory² based upon lists solicited from dozens of agencies and organizations. We used the results of this extensive data collection process to assign minority or female status to the ownership of each firm in the analysis.

The state's spending is highly concentrated in the health care sector. Utilization of M/FBEs is also highly concentrated by sector, but not in health care; in fact, M/FBEs received only 0.4 percent of health care dollars. While not a surprising result in a sector totally dominated by a relatively small number of large, national firms, it is this sector that drives the ultimate M/FBE utilization findings. Further, M/FBEs received only 4.0 percent of the spending in the goods sector, the next largest share of total state spending. Table D presents data on the distribution of contract dollars by NAICS code for MBEs, M/FBEs, and non-M/FBEs

**Table D: Industry Percentage Distribution of Dollars by Race and Gender,
All Sectors
(MBE, White Female, Non-M/FBE) (share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
236115	47.30%	47.30%	52.70%	100.00%
236220	0.20%	0.30%	99.70%	100.00%
237310	0.00%	0.00%	100.00%	100.00%
238130	44.70%	56.50%	43.50%	100.00%
238140	0.00%	0.00%	100.00%	100.00%
238160	14.70%	14.70%	85.30%	100.00%
238210	0.10%	4.80%	95.20%	100.00%
238220	0.00%	7.80%	92.20%	100.00%
238910	23.20%	42.60%	57.40%	100.00%
323111	27.80%	68.80%	31.20%	100.00%
423120	0.00%	0.00%	100.00%	100.00%
423430	0.60%	0.60%	99.40%	100.00%
423450	0.00%	4.90%	95.10%	100.00%
423830	1.00%	1.50%	98.50%	100.00%
424110	98.30%	98.30%	1.70%	100.00%
424120	16.10%	16.10%	83.90%	100.00%
424210	0.00%	97.20%	2.80%	100.00%
424690	0.00%	0.00%	100.00%	100.00%
441110	0.00%	0.00%	100.00%	100.00%
443142	0.00%	0.00%	100.00%	100.00%
484110	10.40%	10.40%	89.60%	100.00%
484230	12.70%	14.70%	85.30%	100.00%
492110	0.00%	100.00%	0.00%	100.00%
524114	0.00%	0.00%	100.00%	100.00%
541330	23.50%	24.80%	75.20%	100.00%

² Appendix A.

541511	0.00%	0.00%	100.00%	100.00%
541612	0.00%	67.70%	32.30%	100.00%
541613	0.00%	35.10%	64.90%	100.00%
541618	0.00%	1.60%	98.40%	100.00%
541810	16.40%	16.40%	83.60%	100.00%
541830	0.00%	100.00%	0.00%	100.00%
541850	0.00%	3.30%	96.70%	100.00%
541990	97.90%	98.50%	1.50%	100.00%
561110	0.00%	11.60%	88.40%	100.00%
561499	0.00%	0.00%	100.00%	100.00%
611710	0.00%	0.00%	100.00%	100.00%
621511	0.00%	0.00%	100.00%	100.00%
621999	0.00%	0.00%	100.00%	100.00%
713290	0.00%	0.00%	100.00%	100.00%
811198	0.00%	0.00%	100.00%	100.00%
TOTAL	2.00%	3.20%	96.80%	100.00%

Source: CHA analysis of state data.

3. Availability of Minority- and Female-Owned Firms in Illinois' 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 found the aggregated weighted availability of M/FBEs to be 12.8 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 Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	2.7%	1.0%	0.6%	0.1%	8.4%	4.4%	12.8%	87.2%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

4. Disparity Analysis of Illinois' Utilization of Minority- and Female-Owned Firms

We next compared the utilization of M/FBEs with the availability of M/FBEs. 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 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.³

We determined that the disparity ratios were substantively significant for all groups except Asians, and statistically significant for non-M/WBEs.⁴ These results support the inference that barriers based on race and gender continue to impede opportunities on state projects for each racial and ethnic minority group, for White women, for minorities as a whole and for M/WBEs as a whole. Table F presents the results of this disparity analysis by demographic group for state-funded contracts.

**Table F: Disparity Ratios by Demographic Group,
All Sectors
(total dollars)**

Demographic Group	Disparity Ratio
Black	29.5%*
Hispanic	72.8%*
Asian	83.0%
Native American	0.0%*
White Female	14.3%*
MBE	45.7%*
MFBE	25.0%*
Non-MFBE	111.0%**

Source: CHA analysis of state data.

*Indicates substantive significance below the 0.80 level

**Indicates statistical significance at the 0.05 level

5. Analysis of Race and Gender Disparities in the Illinois Economy

We explored the data and literature relevant to how discrimination in the state’s market and throughout the wider economy affects the ability of minorities and women to fairly and fully engage in state contract opportunities. First, we analyzed the earnings of minorities and women relative to White men; the rates at which M/FBEs in Illinois 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

³ 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.”).

⁴ For a discussion of the meaning of statistical significance and its role in the Study’s analysis, see Appendix D.

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”) indicates 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 access to commercial credit and the development of human capital further reports that minorities continue to face constraints on their entrepreneurial success based on race. These constraints negatively impact the ability of firms to form, to grow, and to succeed.

Taken together with other evidence such as anecdotal data and analyses of the agency’s own contracting, this is the type of proof that supports the ability of the state to continue to employ narrowly tailored race- and gender-conscious measures to ensure equal opportunities to access its contracts and associated subcontracts.

6. Qualitative Evidence of Race and Gender Disparities in the Illinois Economy

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/FBEs. To collect this evidence, we interviewed 123 individuals to explore their experiences and information regarding attempting to do work on state contracts as prime firms and subcontractors, as well as throughout the wider economy. 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, including:

- Discriminatory attitudes and negative perceptions of competency: Many minority and women owners reported that they continue to encounter discriminatory attitudes, stereotypes and negative perceptions of their qualifications and capabilities by other firms and government officials.

Women, especially those in the construction industry, reported the continuing effects of stereotypes about gender roles and sexist attitudes and behaviors from male colleagues and clients. That minority- and women-owned businesses were perceived to lack the capacity to do additional work or more complex work was another barrier to their success.

- Unequal access to industry and information networks: Exclusion from the industry networks necessary for success was a recurrent theme for many minorities and women. Relationships are key to obtaining work from the agency as well as from prime vendors as subcontractors, subconsultants or suppliers. Longstanding relationships between majority-owned firms and white males were cited as barriers to access. Many participants stated that it is very difficult to obtain work as prime vendors with the State
- Obtaining public sector work on an equal basis: There was almost universal agreement among minority and women owners that the BEP Program remains critical to reduce barriers to equal contracting opportunities and to open doors for state work. A woman who is also disabled faced extreme barriers. To create more prime contract opportunities, there was broad support among M/FBEs and some non-M/FBEs for the concept of a small business target market, and continuing and expanding the State's Small Business Setaside Program.
- Obtaining private sector or "no goals" work on an equal basis: Most participants had not been very successful in accessing private sector projects or government contracts without M/WBE goals. Unless the owner or client insists on inclusion, minorities and women were mostly shut out. Some M/WBEs were able to parlay work from contracts with goals into opportunities on non-goals jobs. Some businesses had been able to leverage participation in programs into non-goals projects, and a handful of White females outside construction reported that they were able to win private sector work

7. Business Enterprise Program Elements and Administration

The Business Enterprise for Minorities, Females, and Persons with Disabilities Act⁵ ("Act") was first adopted in 1994. The Act requires that no less than 20 percent of the total dollar value of state contracts shall be established as a goal to be awarded to businesses owned and controlled by minorities, females and persons with disabilities, further delineated as at least 11 percent to be awarded to Minority-Owned Businesses ("MBEs"), 7 percent to be awarded to Female-Owned Businesses ("FBEs"), and at least 2 percent to be awarded to businesses owned by persons with disabilities ("PBEs"). For construction contracts, the PBE

⁵ 30 ILCS 575 *et seq.*

goal does not apply, and the goal for M/FBEs is 10 percent, with 5 percent to be awarded to FBEs. The Act applies to all state agencies and state universities.

The Act further established the BEP Council (“Council”), which implements, monitors and enforces the goals of the program. The Council is comprised of department heads and individuals representing various stakeholder groups. The Deputy Director of BEP serves as the Secretary of the Council and acts on behalf of the Council in administering the program.

Each state agency and state university must file with the Council for its review and approval an annual compliance plan that outlines its M/F/PBE goals, how the agency intends to reach the goals and a timetable for doing so.

Some spending categories are automatically exempted by the Act. An agency is permitted to request an exemption from the Council of those dollars it seeks to remove from the BEP program. That net amount is then multiplied by 20 percent to determine the dollar amount the agency aspires to spend with certified firms that year.

To be eligible for the program, a business concern must be at least 51 percent owned by one or more persons who are minority persons, females or persons with disabilities. “Business concern” is defined as “a business that has annual gross sales of less than \$75,000,000 as evidenced by the federal income tax return of the business. A firm with gross sales in excess of this cap may apply to the Council for certification for a particular contract if the firm can demonstrate that the contract would have significant impact on businesses owned by minorities, females, or persons with disabilities as suppliers or subcontractors or in employment of minorities, females, or persons with disabilities. Firms that are certified by an agency recognized by CMS may apply for BEP certification through a streamlined process.

Since 2012, BEP goals have been set on contracts valued at \$250,000 or greater. If a goal is to be set, the purchasing agency recommends a goal, accompanied by a scope of work/specification document, for review by BEP. The recommended goal may be raised, lowered or concurred with by BEP.

Bidders must submit a Utilization Plan (“U Plan”) in order to be found responsive to the solicitation. The U Plan is reviewed by the agency to ensure that the selected vendor can meet the goal or has made good faith efforts to do so. It is then forwarded to BEP for evaluation and approval. Vendors that failed to make good faith efforts, even if the lowest bidder, will be deemed non-responsive and therefore ineligible for contract award.

CMS conducts regular educational workshops about “Doing Business with Illinois,” for small businesses about contracting, policies, rules and regulations; certification; prompt vendor payment; loans and grants, along with one-on-one guidance. Workshops are offered in Chicago and Springfield. The BEP website

also lists many resources for small firms. In addition, the state's Department of Commerce and Economic Opportunity manages several race- and gender-neutral programs to assist small businesses.

While not part of the BEP program, the state implements a Small Business Setaside ("SBS") Program, a race- and gender-neutral approach that sets an annual goal that at least 10 percent of the state's contracts are to be awarded to small businesses. Purchases below \$50,000 and 673 product and services procurement codes are to be procured using this method, unless a waiver is obtained from the Chief Procurement Officer. To be eligible, a firm's annual gross revenues must be less than \$6 million for retail or service firms; less than \$10 million for construction and wholesale firms; and less than \$10 million for wholesale manufacturers which must have fewer than 250 employees. Firms certified by BEP must apply separately for SBS program certification.

To explore the impacts of race- and gender-neutral contracting policies and procedures and the implementation of the BEP program, we interviewed 123 individuals about their experiences and solicited their suggestions for changes. We solicited input about their experiences and suggestions for changes or improvements. Topics included:

- Access to information about contracting policies processes, processes and upcoming opportunities: Many interviewees stated that it is difficult to access information about opportunities on state contracts, especially with the smaller agencies, and more assistance with navigating the bureaucracy was a frequent recommendation to reduce barriers. Frustration with the state's information systems crossed industry, size, race and gender lines. The outcomes of particular solicitations and whether the goals were achieved were also difficult to ascertain.
- Outreach efforts to M/FBEs: Many M/FBEs found it difficult to form relationships with prime vendors and sought more state assistance in making contacts, especially for agencies other than CMS and the Capital Development Board. Greater efforts to conduct outreach to M/FBEs, by both state agencies and prime vendors, was repeatedly mentioned as one approach to increase opportunities. Vendor fairs, networking events, and seminars were possible avenues.
- Program eligibility standards and processes: Some interviewees expressed concerns that the program's standards permitted firms to participate that no longer need the "leg up" of the goals and outreach.
- Payments: While timely payment was an issue for all firms, M/FBEs were especially hard hit because of less cash flow and barriers to access to credit.

- Access to bonding and capital: The ability to obtain surety bonding was crucial to M/WBEs' ability to participate on state contracts as prime construction contractors, and recently, some general contractors have begun to require their subcontractors also to obtain bonds. State assistance would help to increase the capacities of certified firms.
- Technical assistance and supportive services to M/FBEs: Some minority and women firms praised the supportive services provided by the Illinois Department of Transportation. They recommended expanding this type of assistance through other state agencies.
- Mentor-protégé relationships: M/FBEs generally supported the concept of mentor-protégé programs, where a larger firm provides various types of support to an emerging firm to increase the protégé's skills and capacities. The mentor-protégé programs of IDOT and the Missouri Departments of Transportation were mentioned as possible models for other agencies, including the Capital Development Board.
- M/FBEs' access to prime contract opportunities: There was significant support for expanding the types and number of contracts procured through the existing Small Business Setaside Program.
- Meeting M/FBE contract goals: Minority and women participants repeatedly urged more enforcement of the programs' standards. Lack of adequate review of good faith efforts documentation and contract performance monitoring were significant problems mentioned by many vendors. While state agencies have recently increased the number of contracts upon which goals are set, many M/FBEs were concerned that too many solicitations were issued without goals or that the application of the requirement that bidders make good faith effort to meet the goals was *pro forma* or inadequate.

The experiences of prime vendors was much more varied. Some general contractors described the program as succeeding in developing relationships with good subcontractors. Most prime contractors try to comply with the state's program and meet the contract goals, and many felt that meeting the goals was imperative. Several reported that they find many M/FBEs to be highly qualified, while others are less competent. Creating the relationships necessary for a successful project, particularly for professional services firms, was a challenge. M/FBEs' lack of resources sometime made it more difficult to include them in proposals or bids, and firms located in the southern part of the state found it especially challenging to meet goals. Many participants expressed puzzlement and frustration about how goals are set on specific contracts, and how to establish a bidder's good faith efforts to meet a goal. The lack of easily searchable databases was a significant problem for many bidders. Antiquated systems increased the difficulties.

- Contract performance monitoring and enforcement: More monitoring of actual utilization of subcontractors was needed, although some participants reported that their utilization had been reviewed by CMS or CDB.

8. Recommendations

Based on these findings, we make the following recommendations.

- Implement an electronic contracting data collection and monitoring system: Functionality should include contract compliance; full firm contact information; utilization plan capture; contract compliance, including verification of payments; contract goal setting; outreach tools; spend analysis of informal contracts and pcards; integrated email and fax notifications; access by authorized users; and export/import integration with existing systems.
- Lengthen solicitation times: Longer windows to solicit and M/FBE participation should increase the ability to meet goals and reduce barriers to M/FBEs submitting bids or proposals as prime vendors.
- Increase access to state contracting information: The electronic management system described above will help to address the concerns raised in the interviews that it is difficult to obtain information about which prime vendors might be interested in a project so that M/FBEs can market themselves and to learn the outcomes of particular solicitations. It will also assist agencies to identify BEP firms prior to the issuance of solicitations for appropriate outreach.
- Increase outreach to M/FBEs: Increase the focus on outreach and events hosted directly by the specific agency or university. Target special outreach to firms in industries with little M/FBE participation.
- Provide agency contracting forecasts: Adopt the procurement best practice of providing annual or semi-annual agency contracting forecasts, whereby the agency projects approximately what it will spend at the general industry level or on specific projects.
- Review experience requirements: Review qualification requirements to ensure that M/WBEs and small firms are not unfairly disadvantaged and that there is adequate competition for state work.
- Expand small contractor bonding and financing programs: Access to bonding and working capital are the two of the largest barriers to the development and success of M/F/PBEs and small firms. The state has developed several state-sponsored bonding and financing assistance programs for such firms. We applaud those efforts, but more should be

done. More resources that will permit larger loans and bonds to increase capacity are needed, and special efforts should be made to include firms in a variety of industries and ensure that all groups have access to these resources

- Coordinate the BEP program with the Small Business Setaside program: There was little awareness of the SBS program among BEP certified firms. We recommend that the two programs use the same industry codes; adopt the same size standards; and consider annual gross receipts on the same basis. This will reduce the burdens on firms seeking to participate in both programs and confusion about which standards apply to individual contracts and individual firms.
- Create a cabinet level position with overall responsibility for inclusion: To be fully effective, the commitment of the government of Illinois must be clear and enforced. The BEP program should continue to be administered and overseen by CMS, but a cabinet level position that reports directly to the governor will help to coordinate efforts across the state agencies and universities and develop statewide policies to implement best practices.
- Use the study to set the overall, annual M/FBE goals: The overall, weighted availability of M/FBEs in all sectors combined was 12.8 percent. There are no quantitative data on the availability of PBEs, but we note that because disability is not a protected classification for Equal Protection Amendment analysis, precise estimates are not necessary; continuing the current goal of 2 percent is reasonable.
- Use the study to set M/FBE contract goals: The detailed availability estimates in the study should serve as the starting point for contract goal setting. Lower the threshold at which BEP goals are and consider all scopes of work of the contract. The state should apply its current interim goal setting policies and protocols to the data in the study. Adopt a flexible approach where the agency, with BEP's, approval may set separate goals for MBE and for FBEs utilization (similar to CDB) to increase the diversity of firms utilized on the contract. Bid some "control contracts" without goals to illuminate whether certified firms are used or even solicited in the absence of goals.
- Narrowly tailor program eligibility standards: The case law has evolved significantly since the BEP program was adopted over 20 years ago. 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. The state should therefore consider more narrowly tailoring the criteria for eligibility to participate in the program to meet these strict scrutiny tests. 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. Further, the case law is consistent that a state may remedy discrimination only in those markets in which it operates. We therefore suggest that the program's presumptive eligibility be restricted to Illinois-based businesses. However, out of state firms, such those located in bordering state or operating in national markets, should be eligible if they can demonstrate efforts to do business with the state or with prime vendors to the state.

- Increase monitoring, accountability and transparency: More monitoring is necessary. Purchasing agency contract administration staff and project field managers must be the first line check on vendors' compliance with their approved Utilization Plans. Monthly reporting should be required, using the electronic system. Agencies' should be required to post results and progress towards meeting their agency compliance plans. What gets measured, gets valued. This will also greatly assist the BEP Council to perform its responsibilities to enforce, monitor and recommend program improvements.
- Consider adopting a pilot Mentor-Protégé Program: The state should consider implementing a Mentor-Protégé Program for construction and construction-related professional services firms, similar to that adopted by the Illinois Department of Transportation ("IDOT"). This approach was welcomed by M/FBEs and several large prime contractors as a way to increase M/FBEs' capacities, and several owners reported good experiences with IDOT's program. Perhaps this approach can be piloted by CDB. If successful, it could be expanded to additional industries.
- Conduct regular BEP program reviews: To meet the requirements of strict constitutional scrutiny and ensure best practices in program administration continue to be applied, the state should conduct a full and thorough review of the evidentiary basis for the program approximately every five to seven years. A sunset date for the program, when it will end unless reauthorized, should be adopted to meet the narrow tailoring test that race-and gender-conscious measures be used only when necessary. A new disparity study or other applicable research should be commissioned in time to meet the sunset date.
- Develop performance measures for program success: The state should develop quantitative performance measures for overall success of the program to evaluate its effectiveness in reducing the systemic barriers identified by the Study. In addition to meeting goals, possible benchmarks might be the number of good faith effort waiver requests; the number and dollar amounts of bids rejected as non-responsive for failure to make good faith efforts to meet the goal; the number, type and dollar amount of M/FBE substitutions during contract performance; growth in the number, size and scopes of work of certified firms; increased variety in the

industries in which M/FBEs are awarded prime contracts and subcontracts; and graduation data.

II. Legal Standards for State 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.⁶

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 as 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.⁷ 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.

⁶ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

⁷ *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.⁸

In *Adarand v. Peña*,⁹ the 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.¹⁰ However, appellate courts, including the Seventh Circuit Court of Appeals, have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program.¹¹ Therefore, we advise that the State 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.¹² 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. We therefore focus our analysis in this Study on the constitutional standards applicable to race- and gender-based preferences.

Unlike most legal challenges, the defendant has the initial burden of producing “strong evidence” in support of a race-conscious program.¹³ The plaintiff must

⁸ *United States v. Paradise*, 480 U.S. 149, 171 (1987).

⁹ *Adarand v. Peña*, 515 U.S. 200 (1995).

¹⁰ *Cf. United States v. Virginia*, 518 U.S. 515 (1996).

¹¹ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 720 (7th Cir. 2007) (“*Northern Contracting III*”).

¹² [*United States v. Carolene Products Co.*](#), 304 U.S. 144 (1938).

¹³ *Aiken v. City of Memphis*, 37 F.3d 1155, 1162 (6th Cir. 1994).

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.¹⁴ "[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."¹⁵ A plaintiff "cannot meet its burden of proof through conjecture and unsupported criticism of [the government's] evidence."¹⁶ 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."¹⁷ When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.¹⁸ 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.¹⁹

There is no need of formal legislative findings of discrimination,²⁰ nor "an ultimate judicial finding of discrimination before [a local government] can take affirmative steps to eradicate discrimination."²¹

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

¹⁴ *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).

¹⁵ *Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 916 (11th Cir. 1997).

¹⁶ *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).

¹⁷ *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004).

¹⁸ *Engineering Contractors II*, 122 F.3d at 916; *Coral Construction Co. v. King County*, 941 F.2d 910 921 (9th Cir. 1991).

¹⁹ *Adarand VII*, 228 F.3d at 1166; *Engineering Contractors II*, 122 F.3d at 916; *Concrete Works II*, 36 F.3d at 1522-1523; *Webster*, 51 F. Supp. 2d at 1364; see also *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277-278 (1986).

²⁰ *Webster v. Fulton County, Georgia*, 51 F.Supp.2d 1354, 1364 (N.D. Ga. 1999).

²¹ *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1522 (10th Cir. 2003).

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 establish the State's compelling interest in remedying discrimination and developing narrowly tailored initiatives.

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

City of Richmond v. J.A. Croson Co. established the constitutional contours of permissible race-based public contracting programs. Reversing long established law, the Supreme 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.²²

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.²³ 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.²⁴

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.²⁵

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

²² 488 U.S. at 491-92.

²³ 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.”).

²⁴ 488 U.S. at 493.

²⁵ *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."²⁶

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."²⁷

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.²⁸ 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 jurisdiction. If the

²⁶ *Id.* at 510.

²⁷ *Id.*

²⁸ See *Grutter*, 529 U.S. at 336-337 (quotas are not permitted; race must be used in a flexible, non-mechanical way).

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.²⁹

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.³⁰ 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.³¹

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 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

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

³⁰ *Id.* at 502.

³¹ See, e.g., *Northern Contracting III*, 473 F.3d at 723.

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*.³²

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 DBE Program avoids these pitfalls. Part 26 "provides for a flexible system of contracting goals that contrasts sharply with the rigid quotas invalidated in *Croson*."³³

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

C. Establishing a "Strong Basis in Evidence" for the State's Minority- and Female-Owned Business Enterprise Program

It is well established that disparities in an agency's utilization of Minority- and Female-Owned Business Enterprises ("M/FBEs") 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/FBEs 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.³⁴ 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/FBEs.³⁵

³² *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").

³³ *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).

³⁴ *Adarand VII*, 228 F.3d at 1166 ("statistical and anecdotal evidence are appropriate").

³⁵ *Id.*

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.”³⁶

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.”³⁷ Denver further linked its award of public dollars to discriminatory conduct through the testimony of M/WBEs that identified general contractors who used them on City projects with M/WBE goals but refused to use them on private projects without goals.

The following are the 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 the State’s Market Area

The first step is to determine the market areas in which the agency 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.³⁸ 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.³⁹

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

³⁶ *Concrete Works IV*, 321 F.3d at 976.

³⁷ *d.* at 977.

³⁸ *Croson*, 488 U.S. at 508.

³⁹ *Concrete Works II*, 36 F.3d at 1520 (to confine data to strict geographic boundaries would ignore “economic reality”).

subcontract dollar payments.⁴⁰ 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.⁴¹

2. Examine Disparities between M/FBE Availability and the State's Utilization of M/FBEs

Next, the study must estimate the availability of minorities and women to participate in the State's contracts and its history of utilizing M/FBEs as prime contractors and associated subcontractors. The primary inquiry is whether there are statistically significant disparities between the availability of M/FBEs 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 case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.⁴²

This is known as the "disparity ratio" or "disparity index." A disparity ratio measures the participation of a group in the government's contracting opportunities by dividing that group's utilization by the availability of that group, and multiplying that result by 100%. Courts have looked to disparity indices in determining whether strict scrutiny is satisfied.⁴³ 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.⁴⁴

The first step is to calculate the availability of minority- and women-owned firms in the government's geographic and industry market area. In addition to creating

⁴⁰ "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").

⁴¹ *Id.* at pp. 50-51.

⁴² *Croson*, 488 U.S. at 509; see *Webster*, 51 F.Supp.2d at 1363, 1375.

⁴³ *Scott*, 199 F.3d at 218; see also *Concrete Works II*, 36 F.3d at 1526-1527; *O'Donnell Construction Co., Inc., v. State of Columbia*, 963 F.2d 420, 426 (D.C. Cir. 1992); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 916 (11th Cir. 1990), *cert. denied*, 498 U.S. 983 (1990).

⁴⁴ 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.

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.⁴⁵

There is no requirement to control for firm size, area of specialization, and whether the firm had bid on agency projects. While it may be true that M/WBEs are smaller in general than white male firms, most construction firms are small and can expand and contract to meet their bidding opportunities. Importantly, size and experience are not race- and gender-neutral variables: “M/WBE construction firms are generally smaller and less experienced *because of* discrimination.”⁴⁶ To rebut this inference, a plaintiff must proffer its own study showing that the disparities disappear when such variables are held constant and that controlling for firm specialization explained the disparities. Additionally, *Croson* does not “require disparity studies that measure whether construction firms are able to perform a *particular contract*.”⁴⁷

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.⁴⁸

Nor must the government demonstrate that the “ordinances will *change* discriminatory practices and policies” in the local market area; such a test would be “illogical” because firms could defeat the remedial efforts simply by refusing to cease discriminating.⁴⁹

Next, an agency 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.

⁴⁵ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868, at *70 (Sept. 8, 2005) (IDOT’s custom census approach was supportable because “discrimination in the credit and bonding markets may artificially reduce the number of M/WBEs”).

⁴⁶ *Concrete Works IV*, 321 F.3d at 983 (emphasis in the original).

⁴⁷ *Id.* at 987-88 (emphasis in the original).

⁴⁸ *Id.* at 971.

⁴⁹ *Id.* at 973 (emphasis in the original).

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.⁵⁰

Similarly, statistical evidence by its nature cannot identify the individuals responsible for the discrimination.⁵¹

3. The Results of Unremediated Markets

The results of contracts solicited without goals are an excellent indicator of whether discrimination continues to impact opportunities in public contracting. Evidence of race and gender discrimination in relevant "unremediated"⁵² markets provides an important indicator of what level of actual M/WBE participation can be expected in the absence of government mandated affirmative efforts to contract with M/WBEs.⁵³ As the Eleventh Circuit has acknowledged, "the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market."⁵⁴ If M/WBE utilization is below availability in unremediated markets, an inference of discrimination may be supportable. The virtual disappearance of M/WBE participation after programs have been enjoined or abandoned strongly indicates substantial barriers to minority subcontractors, "raising the specter of racial discrimination."⁵⁵ Unremediated markets analysis addresses whether the government has been and continues to be a "passive participant" in such discrimination, in the absence of affirmative action remedies.⁵⁶ The court in the Chicago case held that the "dramatic decline in the use of M/WBEs when an affirmative action program is terminated, and the paucity of use of such firms when no affirmative action program was ever initiated," was proof of the City's compelling interest in employing race- and

⁵⁰ *Id.* at 971.

⁵¹ *Id.* at 973.

⁵² "Unremediated market" means "markets that do not have race- or gender-conscious subcontracting goals in place to remedy discrimination." *Northern Contracting II*, at *36.

⁵³ See, e.g., *Western States*, 407 F.3d at 992 (Congress properly considered evidence of the "significant drop in racial minorities' participation in the construction industry" after state and local governments removed affirmative action provisions).

⁵⁴ *Engineering Contractors II*, 122 F.3d at 912.

⁵⁵ *Adarand VII*, 228 F.3d at 1174.

⁵⁶ See also *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, 91 F.3d 586, 599-601 (3rd Cir. 1996) ("*Philadelphia III*").

gender-conscious measures.⁵⁷ Evidence of unremediated markets “sharpens the picture of local market conditions for MBEs and WBEs.”⁵⁸

Therefore, if M/WBEs are “overutilized” because of the entity’s 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.

4. 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.⁵⁹ 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....

⁵⁷ *Builders Association of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725, 737 (N.D. Ill. 2003); see also *Concrete Works IV*, 321 F.3d at 987-988.

⁵⁸ *Concrete Works II*, 36 F.3d at 1529.

⁵⁹ *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).

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.⁶⁰

Business discrimination studies and lending formation studies are relevant and probative because they show a strong link between the disbursement of public funds and the channeling of those funds due to private discrimination. "Evidence that private discrimination results in barriers to business formation is relevant because it demonstrates that M/WBEs are precluded *at the outset* from competing for public construction contracts. Evidence of barriers to fair competition is also relevant because it again demonstrates that *existing* M/WBEs are precluded from competing for public contracts."⁶¹ 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 DBE Program for federal-aid transportation contracts, the courts agree that disparities between the earnings of minority-owned firms and similarly situated non-minority-owned firms and the disparities in commercial loan denial rates between Black business owners compared to similarly situated non-minority business owners are strong evidence of the continuing effects of discrimination.⁶² 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.

⁶⁰ *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1168-69 (10th Cir. 2000) ("*Adarand VII*"), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941, 534 U.S. 103 (2001).

⁶¹ *Id.*

⁶² *Adarand VII*, 228 F.3d 1147 (10th Cir. 2000) ("*Adarand VII*"), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941, 534 U.S. 103 (2001); *Western States*, 407 F.3d at 993; *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2004 U.S. Dist. LEXIS 3226 at *64 (N.D. Ill., Mar. 3, 2004) ("*Northern Contracting I*");

Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.⁶³

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

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.”⁶⁴ Testimony about discrimination practiced by prime contractors, bonding companies, suppliers, and lenders has been found relevant regarding barriers both to minority firms’ business formation and to their success on governmental projects.⁶⁵ 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.”⁶⁶ “[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.”⁶⁷

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.”⁶⁸ 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

⁶³ *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.”).

⁶⁴ *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 399 (1977).

⁶⁵ *Adarand VII*, 228 F.3d at 1168-1172.

⁶⁶ *Concrete Works II*, 36 F.3d at 1520, 1530.

⁶⁷ *Engineering Contractors II*, 122 F.3d at 926.

⁶⁸ *Id.* at 249.

described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry."⁶⁹

D. Narrowly Tailoring a Minority-Owned and Female-Owned Business Enterprise Procurement Program for the State

Even if the State has a strong basis in evidence to believe that race-based measures are needed to remedy identified discrimination, the program must 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:

- 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;
- The flexibility of the program requirements, including the provision for good faith efforts to meet goals and contract specific goal setting procedures;
- The congruence between the remedies adopted and the beneficiaries of those remedies;
- Any adverse impact of the relief on third parties; and
- The duration of the program.⁷⁰

1. Consider Race- and Gender-Neutral Remedies

Race- and gender-neutral approaches are a necessary component of a defensible and effective M/FBE program⁷¹ and the failure to seriously consider such remedies has been fatal to several programs.⁷² Difficulty in accessing

⁶⁹ *Concrete Works IV*, 321 F.3d at 989.

⁷⁰ *United States v. Paradise*, 480 U.S. 149, 171 (1987); *see also Sherbrooke*, 345 F.3d at 971-972.

⁷¹ *Croson*, 488 U.S. at 507 (Richmond considered no alternatives to race-based quota); *Drabik II*, 214 F.3d at 738; *Philadelphia III*, 91 F.3d at 609 (City's failure to consider race-neutral alternatives was particularly telling); *Webster*, 51 F.Supp.2d at 1380 (for over 20 years County never seriously considered race-neutral remedies); *cf. Aiken*, 37 F.3d at 1164 (failure to consider race-neutral method of promotions suggested a political rather than a remedial purpose).

⁷² *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.

procurement opportunities, restrictive bid specifications, excessive experience requirements, and overly burdensome insurance and/or bonding requirements, for example, might be addressed by the State 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.⁷³ Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.⁷⁴

The requirement that the recipient 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.⁷⁵

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.⁷⁶ 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.”⁷⁷

2. Set Targeted Goals

Numerical goals or benchmarks for M/FBE participation must be substantially related to their availability in the relevant market.⁷⁸ 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.⁷⁹ “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*.”⁸⁰

⁷³ See 49 CFR § 26.51.0.

⁷⁴ *Croson*, 488 U.S. at 503 n.3; *Webster*, 51 F.Supp.2d at 1380.

⁷⁵ See, e.g., *Sherbrooke*, 345 F.3d. at 973

⁷⁶ *Grutter*, 529 U.S. at 339.

⁷⁷ *Coral Construction*, 941 F.2d at 923.

⁷⁸ *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) (“*Baltimore I*”).

⁷⁹ 49 C.F.R. § 26.45.

⁸⁰ *Id.*

Goals can be set at various levels of particularity and participation. The entity may set an overall, aspirational goal for its annual, aggregate spending. Annual goals can be further disaggregated by race and gender.

At least one court has recognized that goal setting is not an absolute science. In holding the DBE regulations to be narrowly tailored, the Eighth Circuit noted that “[t]hrough 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.”⁸¹ However, sheer speculation cannot form the basis for an enforceable measure.⁸²

It is settled case law that goals for a particular solicitation should reflect the particulars of the contract, not reiterate annual aggregate targets; goals must be contract specific. Contract goals must be based upon availability of M/FBEs to perform the anticipated scopes of the contract. Not only is this legally mandated,⁸³ but this approach also reduces the need to conduct good faith efforts reviews as well as the temptation to create “front” companies and sham participation to meet unreasonable contract goals. While this is more labor intensive than defaulting to the annual, overall goals, there is no option to avoid meeting narrow tailoring 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.⁸⁴ A M/FBE program must provide for contract awards to firms who fail to meet the contract goals but make good faith efforts to do so.⁸⁵ 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.⁸⁶ This feature has been central to the holding that the DBE program meets the narrow tailoring requirement.⁸⁷

⁸¹ *Sherbrooke*, 345 F.3d. at 972.

⁸² *BAGC v. Chicago*, 298 F.Supp.2d at 740 (City’s MBE and WBE goals were “formulistic” percentages not related to the availability of firms).

⁸³ See *Sherbrooke*, 345 F.3d at 972; *Coral Construction*, 941 F.2d at 924.

⁸⁴ 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”).

⁸⁵ 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.”).

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

⁸⁷ See, e.g., *Sherbrooke*, 345 F.3d. at 972.

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

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 three ways: which groups to include, how to define those groups, and which persons will be eligible to be included within those groups.

The groups to include must be based upon the evidence.⁸⁸ 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.”⁸⁹ In striking down Cook County’s program, the Seventh Circuit remarked that a “state or local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian-Americans and women.”⁹⁰ 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.⁹¹ Therefore, remedies should be limited to those firms that have suffered actual harm in the market area.⁹²

Next, the DBE Program’s rebuttable presumptions of social and economic disadvantage, including the requirement that the disadvantaged owner’s personal net worth not exceed a certain ceiling and that the firm must meet the Small Business Administration’s size definitions for its industry, have been central to the courts’ holdings that it is narrowly tailored.⁹³ Congress has taken significant steps to minimize the race-conscious nature of the Program. “[W]ealthy 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

⁸⁸ *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, 6 F.3d 990, 1007-1008 (3rd Cir. 1993) (“*Philadelphia II*”) (strict scrutiny requires data for each minority group; data was insufficient to include Hispanics, Asians or Pacific Islanders or Native Americans).

⁸⁹ *Webster*, 51 F.Supp.2d at 1380–1381.

⁹⁰ *Builders Association of Greater Chicago v. County of Cook*, 256 F.3d 642, 646 (7th Cir. 2001).

⁹¹ *Concrete Work IV*, 321 F.3d at 971 (Denver introduced evidence of bias against each group; that is sufficient).

⁹² *H. B. Rowe Co. v. Tippett*, 615 F.3d 233, 254 (4th Cir. 2010) (“[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.”).

⁹³ *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 grounds*, 41 F.3d 62 (2nd Cir. 1992) (definition of “disadvantage” was vague and unrelated to goal).

relevant in the program, but it is not a determinative factor.”⁹⁴ Further, anyone can challenge the disadvantaged status of any firm.⁹⁵

Finally, the policy question of the level of specificity at which to define beneficiaries must be addressed. Approaches range from a single M/FBE or DBE goal that includes all racial and ethnic minorities and nonminority women,⁹⁶ to separate goals for each minority group and women.⁹⁷ We note, however, that 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.⁹⁸

5. Evaluate the Burden on Third Parties

Failure to make “neutral” changes to contracting and procurement policies and procedures that disadvantage M/FBEs and other small businesses may result in a finding that the program unduly burdens non-M/FBEs.⁹⁹ However, “innocent” parties can be made to share some of the burden of the remedy for eradicating racial discrimination.¹⁰⁰ The burden of compliance need not be placed only upon those firms directly responsible for the discrimination. The proper focus is whether the burden on third parties is “too intrusive” or “unacceptable.”

Burdens must be proven, and cannot constitute mere speculation by a plaintiff.¹⁰¹ “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

⁹⁴ *Id.* at 973.

⁹⁵ 49 C.F.R. §26.87.

⁹⁶ See 49 C.F.R. §26.45(h) (overall goal must not be subdivided into group-specific goals).

⁹⁷ See *Engineering Contractors II*, 122 F.3d at 900 (separate goals for Blacks, Hispanics and women).

⁹⁸ *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.”).

⁹⁹ 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).

¹⁰⁰ *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 is [sic] has suffered anything more than minimal revenue losses due to the program.”).

¹⁰¹ *Rowe*, 615 F.3d at 254 (prime bidder had no need for additional employees to perform program compliance and need not subcontract work it can self-perform).

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.”¹⁰²

Narrow tailoring does permit certified firms acting as prime contractors to count their self-performance towards meeting contract goals, if the study finds discriminatory barriers to prime contract opportunities and there is no requirement that a program be limited only to the subcontracting portions of contracts. The DBE program regulations provide this remedy for discrimination against DBEs seeking prime work,¹⁰³ and the regulations do not limit the application of the program to only subcontracts.¹⁰⁴ The trial court in upholding the Illinois DOT’s DBE program explicitly recognized that barriers to subcontracting 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.¹⁰⁵

6. Examine the Duration and Review of 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.”¹⁰⁶ 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

¹⁰² *Western States*, 407 F.3d at 995.

¹⁰³ 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.”).

¹⁰⁴ 49 C.F.R. § 26.45(a)(1).

¹⁰⁵ *Northern Contracting II*, 2005 U.S. Dist. LEXIS 19868 at 74.

¹⁰⁶ *Adarand III*, 515 U.S. at 238.

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 1994.¹⁰⁷ How old is too old is not definitively answered,¹⁰⁸ but governments would be wise to analyze data at least once every five or six years.

In contrast, the USDOT DBE Program's periodic review by Congress has been repeatedly held to provide adequate durational limits.¹⁰⁹ 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."¹¹⁰

E. Cases from the Seventh Circuit Court of Appeals

Two cases from the circuit governing the State of Illinois illustrate almost all of these principles, and have provided significant guidance to other circuits and agencies across the country.

1. *Builders Association of Greater Chicago v. City of Chicago*

The City of Chicago relied upon the types and quality of evidence discussed above in establishing its strong basis in evidence for its M/WBE program designed to remedy discrimination against Black-, Hispanic- and women-owned construction firms.¹¹¹ However, the program as implemented in 2003, which had not been reviewed since its inception in 1990, was not sufficiently narrowly tailored to meet strict constitutional scrutiny. The court stayed the final order against operation of the Program for construction contracts for six months, to permit the City to review the ruling and adopt a new program.¹¹²

¹⁰⁷ *BAGC v. Chicago*, 298 F.Supp.2d at 739.

¹⁰⁸ See, e.g., *Associated General Contractors of Ohio, Inc. v. Drabik*, 50 F.Supp.2d 741, 747, 750 (S.D. Ohio 1999) ("*Drabik I*") ("A program of race-based benefits cannot be supported by evidence of discrimination which is now over twenty years old.... The state conceded that it had no additional evidence of discrimination against minority contractors, and admitted that during the nearly two decades the Act has been in effect, it has made no effort to determine whether there is a continuing need for a race-based remedy."); *Brunet v. City of Columbus*, 1 F.3d 390, 409 (6th Cir. 1993) (fourteen-year-old evidence of discrimination "too remote to support a compelling governmental interest.").

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

¹¹⁰ *Rowe*, 615 F.3d at 253.

¹¹¹ *Builders Association of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725 (N.D. Ill. 2003).

¹¹² A similar suit was filed against Cook County's Program, which was declared unconstitutional in 2000. *Builders Association of Greater Chicago v. County of Cook*, 123 F.Supp.2d 1087 (N.D. Ill. 2000); *aff'd*, 256 F.3d 642 (7th Cir. 2001) ("*BAGC v. Cook*"). In contrast to the City of Chicago, Cook County presented very little statistical evidence and none directed towards establishing M/WBE availability, utilization, economy-wide evidence of disparities, or other proof beyond anecdotal testimony. It also provided no evidence related to narrow tailoring.

The opinion first reviews the historical proof of discrimination against minorities, particularly Blacks, in the Chicago construction industry. While not legally mandated, Chicago was a segregated city and “City government was implicated in that history.” After the election of Harold Washington as the first Black mayor in 1983, several reports focused on the exclusion of minorities and women from City procurement opportunities as well as pervasive employment discrimination by City departments. Mayor Washington imposed an executive order mandating that at least 25 percent of City contracts be awarded to minority-owned businesses and 5 percent to women-owned businesses.

In response to *Croson*, Chicago commissioned a Blue Ribbon Panel to recommend an effective program that would survive constitutional challenge. Based upon the Panel’s Report, and 18 days of hearings with over 40 witnesses and 170 exhibits, Chicago adopted a new program in 1990 that retained the 25 percent MBE and 5 percent WBE goals; added a Target Market, wherein contracts were limited to bidding only by M/WBEs; and provided that larger construction contracts could have higher goals.

The court held that the playing field for minorities and women in the Chicago area construction industry in 2003 was still not level. The City presented a great amount of statistical evidence. Despite the plaintiff’s attacks about over-aggregation and disaggregation of data and which firms were included in the analyses, “a reasonably clear picture of the Chicago construction industry emerged... While the size of the disparities was disputed, it is evident that minority firms, even after adjustment for size, earn less and work less, and have less sales compared to other businesses.”

That does not mean, however, that speculation about the greater number of M/WBEs that would exist in the absence of discrimination is sufficient to support a current race-based remedy. At the same time, that there was perhaps overutilization of M/WBEs on City projects was not sufficient to abandon remedial efforts, as that result is “skewed by the program itself.”

Further, while it is somewhat unclear whether disparities for Asians and Hispanics result from discrimination or the language and cultural barriers common to immigrants, there were two areas “where societal explanations do not suffice.” The first is the market failure of prime contractors to solicit M/WBEs for non-goals work. Chicago’s evidence was consistent with that presented of the effects of the discontinuance or absence of race-conscious programs throughout the country. Not only did the plaintiff fail to present credible alternative explanations for this universal phenomenon but also this result “follows as a matter of economics... [P]rime contractors, without any discriminatory intent or bias, are still likely to seek out the subcontractors with whom they have had a long and successful relationship... [T]he vestiges of past discrimination linger on to skew the marketplace and adversely impact M/WBEs disproportionately as more recent entrants to the industry... [T]he City has a compelling interest in preventing its tax dollars from perpetuating a market so flawed by past

discrimination that it restricts existing M/WBEs from unfettered competition in that market.”¹¹³

The judge also relied upon the City’s evidence of discrimination against minorities in the market for commercial loans. Even the plaintiff’s experts were forced to concede that, at least as to Blacks, credit availability appeared to be a problem. Plaintiff’s expert also identified discrimination against white females in one data set.

After finding that Chicago met the compelling interest prong, the court held that the City’s program was not narrowly tailored to address these market distortions and barriers because:

- There was no meaningful individualized review of M/WBEs’ eligibility;
- There was no sunset date for the ordinance or any means to determine a date;
- The graduation threshold of \$27.5M was very high and few firms have graduated;
- There was no personal net worth limit;
- The percentages operated as quotas unrelated to the number of available firms;
- Waivers were rarely granted;
- No efforts were made to impact private sector utilization of M/WBEs; and
- Race-neutral measures had not been promoted, such as linked deposit programs, quick pay, contract downsizing, restricting prime contractors’ self-performance, reducing bonds and insurance requirements, local bid preferences for subcontractors and technical assistance.

Chicago is the only city ever to have received a stay to permit revision of its program to meet narrow tailoring. It amended its ordinance to meet the court’s 2004 deadline and continues to implement M/WBE subcontracting goals without interruption.

2. *Northern Contracting, Inc. v. Illinois Department of Transportation*

In this challenge to the constitutionality of the DBE program, the Seventh Circuit Court of Appeals affirmed the State court’s trial verdict that the Illinois

¹¹³ *BAGC v. Chicago*, 298 F. Supp.2d at 738.

Department of Transportation's application of Part 26 was narrowly tailored.¹¹⁴ IDOT had a compelling interest in remedying discrimination in the market area for federally-funded highway contracts, and its DBE Plan was narrowly tailored to that interest and in conformance with the regulations.

To determine whether IDOT met its constitutional and regulatory burdens, the court reviewed the evidence of discrimination against minority and women construction firms in the Illinois area. IDOT had commissioned an Availability Study to meet Part 26's requirements. The IDOT Study included a custom census of the availability of DBEs in IDOT's market area, weighted by the location of IDOT's contractors and the types of goods and services IDOT procures. The Study estimated that DBEs comprised 22.77 percent of IDOT's available firms.¹¹⁵ It next examined whether and to what extent there are disparities between the rates at which DBEs form businesses relative to similarly situated non-minority men, and the relative earnings of those businesses. If disparities are large and statistically significant, then the inference of discrimination can be made. Controlling for numerous variables such as the owner's age, education, and the like, the Study found that in a race- and gender-neutral market area the availability of DBEs would be approximately 20.8 percent higher, for an estimate of DBE availability "but for" discrimination of 27.51 percent.

In addition to the IDOT Study, the court also relied upon:

- An Availability Study conducted for Metra, the Chicago-area commuter rail agency;
- Expert reports relied upon in *BAGC v. Chicago*;
- Expert reports and anecdotal testimony presented to the Chicago City Council in support of the City's revised M/WBE Procurement Program ordinance;
- Anecdotal evidence gathered at IDOT's public hearings on the DBE program;
- Data on DBE involvement in construction projects in markets without DBE goals;¹¹⁶ and

¹¹⁴ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7th Cir. 2007) (7th Cir. 2007) ("*Northern Contracting III*"). Ms. Holt authored IDOT's DBE goal submission and testified as IDOT's expert witnesses at the trial.

¹¹⁵ This baseline figure of DBE availability is the "step 1" estimate U.S. DOT grant recipients must make pursuant to 49 CFR §26.45.

¹¹⁶ *Northern Contracting III*, 473 F.3d at 719 ("Also of note, IDOT examined the system utilized by the Illinois State Toll Highway Authority, which does not receive federal funding; though the Tollway has a DBE goal of 15 percent, this goal is completely voluntary -- the average DBE

- IDOT’s “zero goal” experiment, where DBEs received approximately 1.5 percent of the total value of the contracts. This was designed to test the results of “race-neutral” contracting policies, that is, the utilization of DBEs on contracts without goals.

Based upon this record, the Court of Appeals agreed with the trial court’s judgment that the Program was narrowly tailored. IDOT’s plan was based upon sufficient proof of discrimination such that race-neutral measures alone would be inadequate to assure that DBEs operate on a “level playing field” for government contracts.

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 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.¹¹⁷

usage rate in 2002 and 2003 was 1.6 percent. On the basis of all of this data, IDOT adopted 22.77 percent as its Fiscal Year 2005 DBE goal.”).

¹¹⁷ *Northern Contracting II* at *82 (internal citations omitted); see *Croson*, 488 U.S. at 492.

Table of Cases

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

Adarand Constructors, Inc. v. Peña, 965 F. Supp. 1556 (D. Colo. 1997), *rev’d*, 228 F.3d 1147 (2000) (“*Adarand IV*”).

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

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

Associated General Contractors of America v. City of Columbus, 936 F. Supp. 1363, (S.D. Ohio 1996).

Associated General Contractors of Connecticut v. City of New Haven, 791 F.Supp. 941 (D. Conn. 1992).

Associated General Contractors of Ohio, Inc. v. Drabik, 50 F.Supp.2d 741 (S.D. Ohio 1999) (“*Drabik I*”).

Associated General Contractors of Ohio v. Drabik, 214 F.3d 730 (6th Cir. 2000) (“*Drabik II*”).

Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 83 F.Supp.2d 613 (D. Md. 2000).

Brunet v. City of Columbus, 1 F.3d 390 (6th Cir. 1993), *cert. denied sub nom Brunet v. Tucker*, 510 U.S. 1164 (1994).

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

Builders Association of Greater Chicago v. County of Cook, 123 F.Supp.2d 1087 (N.D. Ill. 2000) (“*Cook I*”).

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

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

Concrete Works of Colorado, Inc. v. City and County of Denver, 823 F.Supp. 821 (D. Colo. 1993) (“*Concrete Works I*”).

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

Concrete Works of Colorado, Inc. v. City and County of Denver, 86 F.Supp.2d 1042 (D. Colo. 2000) (“*Concrete Works III*”).

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

Cone Corporation v. Hillsborough County, 908 F.2d 909 (11th Cir. 1990), *cert. denied*, 498 U.S. 983 (1990).

Contractors Association of Eastern Pennsylvania v. City of Philadelphia, 6 F.3d 990 (3rd Cir. 1993) (“*Philadelphia II*”).

Contractors Association of Eastern Pennsylvania v. City of Philadelphia, 91 F.3d 586 (3rd Cir. 1996) (“*Philadelphia III*”).

Coral Construction Co. v. King County, 941 F.2d 910 (9th Cir. 1991).

Engineering Contractors Assoc. of South Florida, Inc. v. Metropolitan Dade County, 943 F.Supp. 1546 (S.D. Fla. 1996) (“*Engineering Contractors I*”).

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

Florida A.G.C. Council, Inc. v. State of Florida, Case No.: 4:03-CV-59-SPM (N. Dist. Fla. 2004) F.Supp.2d. 571 (N.D. Oh. 1998).

Fullilove v. Klutznick, 448 U.S. 448 (1980).

Grutter v. Bollinger, 539 U.S. 306 (2003).

Harrison & Burrowes Bridge Constructors, Inc. v. Cuomo, 981 F.2d 50 (2nd Cir. 1992).

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

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

North Shore Concrete and Associates, Inc. v. City of New York, 1998 U.S. Dist. LEXIS 6785 (E.D. N.Y. 1998).

Northern Contracting, Inc. v. Illinois Department of Transportation, 2004 U.S. Dist. LEXIS, 3226 (N.D. Ill., Mar. 3, 2004) (“*Northern Contracting I*”).

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

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

O'Donnell Construction Co., Inc., v. District of Columbia, 963 F.2d 420 (D.C. Cir. 1992).

Rothe Development Corporation v. U.S. Department of Defense, 262 F.3d 1306 (Fed. Cir. 2001) (“*Rothe V*”).

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

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

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

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

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

Webster v. Fulton County, Georgia, 51 F.Supp.2d 1354 (N.D. Ga. 1999).

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

Wygant v. Jackson Board of Education, 476 U.S. 267 (1986).

III. State of Illinois' Business Enterprise Program

This Chapter describes the State of Illinois' Business Enterprise Program ("BEP") for Minority- and Female-Owned Businesses ("M/FBEs")¹¹⁸ and Person with Disabilities-Owned Businesses ("PBEs") applicable to state-funded contracts, followed by the results of the business owner interviews discussing the program.

A. Business Enterprise Program Elements and Administration

The Business Enterprise for Minorities, Females, and Persons with Disabilities Act¹¹⁹ ("Act") was first adopted in 1994. It is the state's policy to "promote and encourage the continuing economic development of minority and female owned and operated businesses and that minority and female owned and operated businesses participate in the State's procurement process as both prime and subcontractors."¹²⁰ The state further seeks to "promote and encourage the continuous economic development of businesses owned by persons with disabilities."¹²¹

The Act requires that no less than 20 percent of the total dollar value of state contracts shall be established as a goal to be awarded to businesses owned and controlled by minorities, females and persons with disabilities, further delineated as at least 11 percent to be awarded to Minority-Owned Businesses ("MBEs"), 7 percent to be awarded to Female-Owned Businesses ("FBEs"), and at least 2 percent to be awarded to businesses owned by persons with disabilities ("PBEs").¹²² For construction contracts, the PBE goal does not apply, and the goal for M/FBEs is 10 percent, with 4 percent to be awarded to FBEs. The Act applies to all state agencies and state universities.

The Act further established the BEP Council ("Council"), which implements, monitors and enforces the goals of the program. The Council is composed of the Secretary of Human Services and the Directors of the Department of Human Rights, the Department of Commerce and Economic Opportunity, the Department of Central Management Services, who serves as Council Chair, the Department of Transportation and the Capital Board, or their duly appointed representatives. The Governor appoints ten individuals representing businesses that are minority or female owned or owned by persons with disabilities, two individuals representing the business community, and a representative of public universities for two year terms. The Director of each state agency and the chief executive officer of each state university appoints a liaison to the Council. The

¹¹⁸ In this Chapter, we use the nomenclature "M/FBE" because that is the term in the Business Enterprise Act. However, the much more common term is "M/WBE," which we use in other Chapters as appropriate.

¹¹⁹ 30 ILCS 575 *et seq.*

¹²⁰ 30 ILCS 575/1.

¹²¹ *Id.*

¹²² 30 ILCS 575/4(a).

Deputy Director of BEP serves as the Secretary of the Council and acts on behalf of the Council in administering the program.

In particular, the Council:

- Reviews compliance plans submitted by state agencies and universities;
- Reviews rules and regulations for program implementation;
- Decides appeals of denials of BEP certification;
- Sets Council meeting agendas;
- Makes annual reports to the Governor and the General Assembly;
- Serves as a clearinghouse for information on state contracts; and
- Maintains the list of BEP certified vendors.

Each state agency and state university must file with the Council an annual compliance plan that outlines its M/F/PBE goals, how the agency intends to reach the goals and a timetable for doing so. The Council reviews and approves the plan and may reject any plan that does not comply with the Act or any rules or regulations. Each agency and university must file an annual M/F/PBE utilization report with the Council, which includes a self-evaluation of its efforts to meet its goals.

Some spending categories are automatically exempted by the Act.¹²³ An agency is permitted to request an exemption from the Council of those dollars it seeks to remove from the BEP program. That net amount is then multiplied by 20 percent to determine the dollar amount the agency aspires to spend with certified firms that year.

To be eligible for the program, a business concern must be at least 51 percent owned by one of more persons who are members of the protected class (*i.e.*, minority persons, females or persons with disabilities), or in the case of a corporation, at least 51 percent of the stock in which is owned by one or more such persons; and the management and daily business operations of which are controlled by one or more of the such individuals who own it. “Business concern” is defined as “a business that has annual gross sales of less than \$75,000,000

¹²³ Exempt categories are: contracts between or within state agencies that do not include payments to private vendors; contracts or payments to other governmental entities; employee wages, salary and other payroll related expenses; payments to individuals or groups in the nature of reimbursement, settlement, entitlement or assistance; debt retirement and refunds of money; grants; public utility contracts and payments; real estate acquisitions; and miscellaneous contracts and expenditures (association dues and periodical subscriptions). 36 Ill. Reg. 10717 (2012).

as evidenced by the federal income tax return of the business. A firm with gross sales in excess of this cap may apply to the Council for certification for a particular contract if the firm can demonstrate that the contract would have significant impact on businesses owned by minorities, females, or persons with disabilities as suppliers or subcontractors or in employment of minorities, females, or persons with disabilities.¹²⁴ Firms that are certified by an agency recognized by CMS¹²⁵ may apply for BEP certification through a streamlined process.

In 2005, the program was strengthened by a Memorandum from the Director of CMS to agency directors and other staff establishing a new policy that required agencies to include a BEP goal in Requests for Proposal (“RFPs”) for contracts greater than \$500,000. There were no goals on Invitations for Bids (“IFBs”) before FY 2012. In 2012, the policy was extended to IFBs and the threshold was lowered to \$250,000. Procurements between \$50,001 and \$249,000 identified by the agencies in coordination with CMS’ Bureau of Strategic Sourcing and BEP include a goal where it is reasonable and attainable.

Agencies appoint a BEP liaison to provide CMS with their agency’s annual spending with BEP firms; the agency’s annual compliance plan; and to assist in setting contract goals.

If a goal is to be set, the purchasing agency recommends a goal, accompanied by a scope of work/specification document, for review by BEP. The recommended goal may be raised, lowered or concurred with by BEP.

If an agency does not seek to set a goal on a specific procurement, it is required to draft a decision memorandum to the Deputy Director of BEP requesting an exception to the CMS policy and providing a detailed justification. CMS will either approve or the deny the request.

Bidders must submit a Utilization Plan (“U Plan”) in order to be found responsive to the solicitation. The U Plan is reviewed by the agency to ensure that the selected vendor can meet the goal or has made good faith efforts to do so. It is then forwarded to BEP for evaluation and approval, which occurs simultaneously with the agency’s review for administrative compliance and technical evaluation. Vendors that failed to make good faith efforts, even if the lowest bidder, will be deemed non-responsive and therefore ineligible for contract award.¹²⁶

The Capital Development Board (“CDB”) employs a somewhat different process from other agencies, per the BEP Act. For construction contracts, it sets separate

¹²⁴ 30 ILCS 575/2(A)(10).

¹²⁵ Recognized agencies are the Illinois Unified Certification Program; the Chicago Minority Supplier Development Council; the Women’s Business Development Center; the City of Chicago; and Cook County.

¹²⁶ 30 ILCS 575/4(e).

goals for MBEs and for FBEs. In addition, bidders have 7 days to submit documentation of their good faith efforts to meet a goal, and a committee decides whether good faith efforts have been made. It also conducts site visits to evaluate compliance with U Plans.

CMS conducts regular educational workshops about “Doing Business with Illinois,” for small businesses about contracting, policies, rules and regulations; seminars on certification, prompt vendor payment, loans and grants, along with one-on-one guidance. Workshops are offered in Chicago and Springfield.

The BEP website also lists many resources for small firms, such as other state agencies, local governments, small business development centers, business resources, chambers of commerce, assist agencies, etc. In addition, the state’s Department of Commerce and Economic Opportunity manages several race- and gender-neutral programs to assist small businesses, including the Capital Access Program, the Advantage Illinois Loan Participation Program, Small Business Development Centers, etc.

While not part of the BEP program, the state implements a Small Business Setaside (“SBS”) Program, a race- and gender-neutral approach that may increase prime contracts awards to M/F/PBEs and other small firms. The Small Business Contracts Act sets an annual goal that at least 10 percent of the state’s contracts are to be awarded to small businesses. This program is administered by the Chief Procurement Officers (“CPOs”), which are independent functions not subject to agency or gubernatorial control. Purchases below \$50,000 and 673 product and services procurement codes¹²⁷ are to be procured using this method, unless a waiver is obtained from the CPO. To be eligible, a firm’s annual gross revenues must be less than \$6 million for retail or service firms; less than \$10 million for construction and wholesale firms; and less than \$10 million for wholesale manufacturers which must have fewer than 250 employees. Firms certified by BEP must apply separately for SBS program certification.

B. Experiences with State Contracting Policies and Procedures and the BEP Program

To explore the impacts of race- and gender-neutral contracting policies and procedures and the implementation of the BEP program, we interviewed 123 individuals about their experiences and solicited their suggestions for changes. 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 10 sessions by participants.

¹²⁷ The state uses National Institute of Government Purchasing codes.

1. Access to Information about Contracting Policies, Processes and Upcoming Opportunities

Many interviewees stated that it is difficult to access information about opportunities on state contracts, especially with the smaller agencies, and more assistance with navigating the bureaucracy was a frequent recommendation to reduce barriers. Frustration with the state's information systems crossed industry, size, race and gender lines.

[Dealing with CMS is] like dealing with the Vatican.

We've created all these new rules to protect the procurement people. They've created barriers to interfacing with the fiscal officers and the users. And without that information, you can't really dig down and create an environment where this is what the organization has done, this is what we've done, this is our staff, this is our capabilities, this is what we've done with other agencies similar to yours. And this is the value we may bring to the table. We can't make that contact.

Blast email notifications from the Illinois Procurement Bulletin were seen as too broad to be very useful, and that there is a separate Bulletin for higher education added to the confusion and burden of searching for potential opportunities. Information about prime vendors interested in a particular solicitation to facilitate matchmaking by certified firms was difficult to obtain. Suggestions included holding pre-bid conferences for all solicitations of size and then posting on line the names of interested prime firms and subcontractors.

Hold a pre-proposal meeting and then post online who attended it or who has expressed some interest.... If an individual wants to turn in a bid, they need to register their interest. They can do it electronically so that it can be on the website also.

The outcomes of particular solicitations and whether the goals were achieved were also difficult to ascertain.

There was a BEP set aside portion of 20 percent and we don't even know if the project came to fruition. There was just nothing that was out there [about] how it was going to work, no updates in terms of what they were doing or who was awarded the contract.... You're chasing your tail trying to get information out of these people.

Subcontractors want easily accessible information about the status of the contract on which they were listed, including payments.

Why keep it a secret [when the prime vendor has been paid]?

I actually one time had a guy that didn't have much work in the winter so every day I assigned him to go sit in a contractor's office, just sit in the waiting room. And I finally got a payment.

2. Outreach Efforts to M/FBEs

Many M/FBEs found it difficult to form relationships with prime vendors and sought more state assistance in making contacts, especially for agencies other than CMS and the Capital Development Board ("CDB"). Greater efforts to conduct outreach to M/FBEs, by both state agencies and prime vendors, was repeatedly mentioned as one approach to increase opportunities. Vendor fairs, networking events, and seminars were possible avenues.

A lot of the MBEs aren't ready to join those organizations that offer the networking. So, if there's a free state thing that can bring them all together that's nice. And speed dating or not, you're all in the room with people, you have to sit next to somebody and they'll put on some kind of a useful program to attract people and it just gets everybody in the room for free.

3. Program Eligibility Standards and Processes

Some interviewees expressed concerns that the program's standards permitted firms to participate that no longer need the "leg up" of the goals and outreach.

If you want the BEP program to be effective, focus on the people who need it the most and that's the people starting out or on their own. It is small disadvantaged businesses. That's got to be your target.

You want somebody to get a start and then when you get to a certain size not need it anymore and leave it for somebody else.

4. Payments

While timely payment was an issue for all firms, M/FBEs were especially hard hit because of less cash flow and barriers to access to credit.

We have a large project we were doing with the CDB ... one time they got almost 8 months behind. Next thing you know, we're all floating about \$800,000 worth of state money.

[That's] your line of credit ... that really hurts a small firm.

5. Access to Bonding and Capital

The ability to obtain surety bonding was crucial to M/WBEs' ability to participate on state contracts as prime construction contractors, and recently, some general contractors have begun to require their subcontractors also to obtain bonds. State assistance would help to increase the capacities of certified firms.

Maybe the state can look at something to assist small business minority and women [with surety bonding].

6. Technical Assistance and Supportive Services for M/FBEs

Some minority and women firms praised the supportive services provided by the Illinois Department of Transportation (“IDOT”). They recommended expanding this type of assistance through other state agencies.

Supportive services have been very helpful to me.... Helping me with the certified payrolls, QuickBooks programs. As far as bidding and just the whole gamut. They will go out and help you in the field if you need assistance out in the field so they’ve been very instrumental.

We’ve used their services. We’ve also attended some of their seminars. And they’ve been helpful.

The people they send me are wonderful. They’re very helpful. I’ve used them several times.... [But] they run out of funding.... They helped me set up how to do certified payroll. She taught me QuickBooks. They come out and help you with bidding. I can call these people and it’s not just one. I do several as the contracts change. Been pleased with all of them.

7. Mentor-Protégé Relationships

M/FBEs generally supported the concept of mentor-protégé programs, where a larger firm provides various types of support to an emerging firm to increase the protégé’s skills and capacities.

A mentoring program, some kind of way to learn how to get through all the red tape [would be helpful].

That would have been helpful to me, a mentor-protégé [program]. I never intended to be a single discipline shop. If you’d asked me when I was 40 years old what I thought I was grooming toward is to be one of 5 principals in 115 person firm.

The mentor-protégé programs of IDOT and the Missouri Departments of Transportation were mentioned as possible models for other agencies, including the Capital Development Board.

I am utilizing IDOT’s Mentor-Protégé Program.... [It] has really helped a lot and I really do appreciate the Mentor-Protégé Program. I’ve done it on the consulting side as well as the contracting side and I actually think it’s more beneficial on the contracting side.... They’ll sit down with me and they’ll say, you’re going to be too high with this number so let’s look and see how you got it. So they always use us because they get [a 5 percent goal] credit.

8. M/FBEs’ Access to Prime Contract Opportunities

As discussed in Chapter VI, obtaining access to prime contracting opportunities was very difficult for M/FBEs. One remedy is a race- and gender-neutral small

business setaside to promote prime contracting by M/FBEs from all types of firms. There was significant support for expanding the types and number of contracts procured through the existing Small Business Setaside Program. While not under the control of CMS but rather the control of the Chief Procurement Officers, this approach was considered to be useful for BEP firms to grow their capacities, and there were also benefits to prime contractors not eligible to participate.

We have no problem with the small business set aside. For instance, a lot of our team partners will contact us and say, will you back end this for us. And we're happy to do that. If we get a piece and then we can tie that teaming relationship together.... We want our small business people to be successful.

9. Meeting M/FBE Contract Goals

Minority and women participants repeatedly urged more enforcement of the programs' standards. Lack of adequate review of good faith efforts documentation and contract performance monitoring were significant problems mentioned by many vendors.

While state agencies have recently increased the number of contracts upon which goals are set, many M/FBEs were concerned that too many solicitations were issued without goals or that the application of the requirement that bidders make good faith effort to meet the goals was *pro forma* or inadequate.

You have to hold these companies accountable to make sure that the primes make a concerted effort. Many times with the state, there is no percentage requirement. It's not required for BEP. And so what happens is companies say, well, we couldn't find any subcontractors that were qualified.

I don't see a real concerted effort to require BEP participation. The state doesn't require it on all their contracts. They pick the ones they do and they pick the ones they don't. I think they don't enforce the requirements that hold companies accountable and when they say, we made a good faith effort, well what was that? What exactly did you do and how did you vet these vendors to determine that they weren't qualified?

[The state] need[s] to stick to their guns. You know, they need to be advocates for us and not just say, well you tried and we gave you a list and you said none of them worked out.

[Company] tries to pretend there's nobody in our space that they can use and they get away with it.

Just sign the paper so they can stick it in the file and be done with it.

[Prime firms] don't go after the waivers [at the time of award of the contract]. They come backwards at you, renegotiate afterwards.

The experiences of prime vendors was much more varied.

Some general contractors described the program as succeeding in developing relationships with good subcontractors.

We've had some that we needed to use that we wouldn't use if they weren't an MBE [to] supply that match but we've had others that were excellent that we would use whether there was a goal or not. So, it does give you the foot in the door to show what you can do. Some people can do it and some people can't.

We worked with [a WBE] and they did very good. And the next time I had a project, didn't require any goals, I called [them] ... [and she said] you're the only [specialty] who hires me because we're good, not because of my FBE.... So, sometimes it does work.

Most prime contractors try to comply with the state's program and meet the contract goals.

There are times when we would be happy to contract out small things, run them through our company and give them jobs for things to meet the requirements. We're always looking for pieces to make those things work so.

We give our subs all the work [to which we committed at contract award]. If we say that we're going to be using them, we will use them. But we know not every company does that.

Many prime vendors felt that meeting the goals was imperative.

It's a requirement, not as a goal.

Some participants reported that in their experience, goals were not set on state contracts.

The majority of our state contracts don't have a requirement on them because of the technical nature of [the design work] we do.

Several reported that they find many M/FBEs to be highly qualified, while others are less competent.

If somebody doesn't do a good job, they won't get work from us again and there have been smaller businesses that we've done work for who just couldn't deliver and they won't get more things.

Creating the relationships necessary for a successful project, particularly for professional services firms, was a challenge.

We are constantly looking for DBEs, regardless of whether there's goals on a project because we are trying to show that teaming relationship with them.... We don't have any problem trying to meet them or go ahead with them. It is about establishing the original relationship that becomes really hard.

The need to subcontract only with firms prequalified by CBD created additional challenges for prime construction contractors.

You have to get these people prequalified. There are [M/FBEs] out there but they're not Illinois prequalified or CBD prequalified.

Subcontracting work that the prime firm would prefer to self perform was mentioned as a problem by some owners.

There's still the problem with being a prime. If it's all my work, sometimes it's hard to give it away [to meet the goals].... And then you end up being responsible for somebody maybe you haven't worked with a lot.

M/FBEs' lack of resources sometime made it more difficult to include them in proposals or bids.

A lot of times these are small organizations that have five people or ten people and they don't have the resources to put together proposal information or their company information or it's not developed enough that we can use it and then we have to devote our resources to helping them give us what we need in order to [use them].

Firms located in the southern part of the state found it especially challenging to meet goals.

It becomes really difficult when the state has projects down at the bottom of the state to sometimes meet the goals.... We're going up north and we're trying to persuade those people to come down. Now right now, when the economy stinks, they'll go anywhere in the world. But back a number of years ago when they didn't have to leave more than a block from their office, why do they want to go on an eight hour trip to southern Illinois? So, you have to work hard to get them to come, which normally you have to adjust the fees for [transportation costs].

Many participants expressed puzzlement and frustration about how goals are set on specific contracts.

It's almost like they're taking a number and just throwing it on contracts. They don't look at the scope of work and identify whether or not that it would be appropriate to put a goal on that.

[The state is] randomly throwing requirements on these bids [for equipment].

How to establish a bidder's good faith efforts to meet a goal was not well understood by many prime contractors. They experienced the process as opaque and somewhat arbitrary.

Some of the larger agencies do have a formal waiver program where you can submit. But you do have to show proof as to why you wouldn't do that. And of course that's a very subjective thing.

The lack of easily searchable databases was a significant problem for many bidders. Antiquated state systems increased the difficulties.

CDB's is a nightmare because it's just one big Excel spreadsheet [of prequalified firms].... It will not sort [by certification status].... They use their own [unique] codes [rather than commonly used codes like NAICS].

Having to search manually for anything is a timewaster and it's just ridiculous in today's society.... All my bids are electronic when we can do it. And I do all my searching online and I spend the majority of my day on the computer. And for [state agencies] not to have that stuff searchable, to put those requirements on us and then not give us any resources or have it to be the hardest thing to find is the most ridiculous thing I've ever heard.

Short deadlines for bid submission made it more difficult to meet goals. One recommendation was to extend the time for bid or proposal submission.

Consider extending the bid time.... Some of these people don't have that stuff available immediately.... And sometimes the timeframes on these are just crazy. And they're set in stone.

Some White male subcontractors had lost business to certified firms because of the need to make good faith efforts to meet goals.

[The prime consultant will] use somebody else besides me to meet the goals and so that's taking work away from me.... And, it breaks that relationship with the people I've done work with. All of a sudden there is sort of this mentality now, even among architects that are not female or minority owned, that they want to team that way because if they're going to a bigger client or something it kind of makes them look better.

The need for a race- and gender-conscious program was questioned by some prime firms.

This is the land of opportunity. So, why if people are good enough to compete in a certain area, then they ought to be able to compete and why put certain levels on it?... I still adhere to the old adage that [this is the] land of the free and the brave and all that sort of thing and anybody can start from nothing and be something if they really try. Now, I understand that there are some that are so disadvantaged that maybe that doesn't apply and that we need to help them. I'm not trying to come across as coldhearted or anything but I am in business and I'm struggling right now with this issue.

10. Contract Performance Monitoring and Enforcement

More monitoring of actual utilization of subcontractors was needed, according to many M/FBEs and state staff persons. Many firms reported that they did not receive the work as committed to by the prime contractor or received less work than promised.

There's no accountability.

There needs to be substantially more oversight.... We haven't seen any real consequence for bad actors.

There is no follow up after the fact to make sure that the minority-owned businesses actually were used and were paid for what they bid on.

Are goals set and are they being hit?

You definitely need the MBE, WBE program as well as the BEP program. You just need to enforce it and you need to continue to have the companies regardless to who they are, you have to have them prove that they're doing what they say they are doing. You have to have somebody continuing to watch over that.

We need the opportunity, but we also need enforcement and someone to turn to [during contract performance].

The program could work if they had good protocols in place and follow through with those protocols, too.

Allocate the resources and make it happen.

A few participants stated that certified firms sometimes fail to perform a "commercially useful function" on jobs.

A couple [of DBE] contractors just run stuff through their books. And they don't show up on the job. They're pathetic. I know a man who's been in it

20 years and still doesn't own a shovel. That's, to me, a disgrace to this program. That is the barrier I have to overcome.... That's not right. Because there's DBE companies out there that kick butt no matter what race or sex or anything.

Some prime vendors agreed with M/FBEs that more monitoring of compliance during contract performance is needed.

It's up to the government agency to make sure that they use the people they say [the firm would use].

The monitoring does not happen. I mean some agencies are [good] but other agencies don't care.

Some participants reported that their utilization had been monitored.

I do appreciate IDOT and CMS and the Capital Development Board. At least they hold people accountable.... At least they're monitoring it.

C. Conclusion

The program review and the business owner and stakeholder interviews suggest that the state is implementing the program in conformance with strict constitutional scrutiny. However, several enhancements will make it more effective. These include increasing access to information about state procurement processes and upcoming opportunities; additional networking, outreach and matchmaking efforts; prompt and transparent payments; increasing technical assistance, bonding and supportive services to M/FBEs; expanding the Small Business Setaside Program; adopting mentor-protégé initiatives; standardizing the program's implementation across state agencies; and monitoring contract performance and compliance with contractual commitments.

IV. UTILIZATION, AVAILABILITY AND DISPARITY ANALYSIS FOR THE STATE OF ILLINOIS

A. Contract Data Sources and Sampling Method

The Study analyzed contract data for state fiscal years 2010 through 2011. In total, we received records for 26,599 contracts from 33 agencies and universities. Of these, 17,889 were initially eliminated because they were cancelled contracts, contracts with other governments, duplicate records, very small contracts, etc. From the remaining contracts, we identified a final sample for our contract universe that consisted of 3,613 contracts worth \$6,549,333,012.00. To ensure an accurate picture of state spending, we included contracts that the agencies had exempted from goal setting; therefore, our results are not comparable to the annual reports produced for the BEP program.

We collected missing contract data for the large contracts in the file. The Final Contract File contained 86% of the contracts we identified as relevant for the Study, totaling 3,116 contracts worth \$4,183,657,301.88. This file was used to determine the product and geographic market area for the study; to estimate the utilization of Minority- and Female-Owned Business Enterprises (“M/FBEs”) on those contracts; and to calculate M/FBE availability in the state’s marketplace. Because of the much lower constitutional standards applicable to preferences for persons with disabilities and the lack of data sources to determine ownership by persons with disabilities of non-BEP-certified firms (*i.e.*, Hoovers data), we did not include PBE spending in this analysis. However, we note that PBEs may still be included in the program if there is sufficient evidence for M/FBEs because of these much less stringent standards.

B. The State of Illinois’ Product and Geographic Markets

1. The State’s 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,¹²⁸ that make up at least 75 percent of the prime contract and subcontract payments for the Study period.¹²⁹ 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 the state’s activities.

¹²⁸ www.census.gov/eos/www/naics.

¹²⁹ “*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”).

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 will be later constrained by the geographic market area, discussed below.¹³⁰

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

NAICS	NAICS Code Description	NAICS PCT	CUMULATIVE PCT
524114	Direct Health and Medical Insurance Carriers	49.0%	49.0%
561110	Office Administrative Services	8.6%	57.6%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	8.1%	65.7%
713290	Other Gambling Industries	5.7%	71.4%
621999	All Other Miscellaneous Ambulatory Health Care Services	3.3%	74.7%
561499	All Other Business Support Services	2.7%	77.4%
424690	Other Chemical and Allied Products Merchant Wholesalers	2.6%	80.0%
551112	Offices of Other Holding Companies	2.1%	82.1%
541990	All Other Professional, Scientific, and Technical Services	2.0%	84.0%
811198	All Other Automotive Repair and Maintenance	1.8%	85.8%
541810	Advertising Agencies	1.7%	87.6%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	1.6%	89.2%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	1.4%	90.6%

Source: CHA analysis of state data.

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

NAICS	NAICS Code Description	NAICS PCT	CUMULATIVE PCT
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¹³⁰ We conducted a study of the state's information technology and telecommunications spending, *Information Technology and Telecommunications Availability and Disparity Report, 2013*, so those contracts were not included in this subsequent analysis.

524114	Direct Health and Medical Insurance Carriers	56.9%	56.9%
561110	Office Administrative Services	10.0%	66.9%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	9.4%	76.3%
621999	All Other Miscellaneous Ambulatory Health Care Services	3.8%	80.1%
424690	Other Chemical and Allied Products Merchant Wholesalers	3.0%	83.0%
713290	Other Gambling Industries	2.6%	85.6%
551112	Offices of Other Holding Companies	2.4%	88.0%
811198	All Other Automotive Repair and Maintenance	2.0%	90.0%

Source: CHA analysis of State data

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

NAICS	NAICS Code Description	NAICS PCT	PCT TOTAL DOLLARS
713290	Other Gambling Industries	25.0%	25.0%
561499	All Other Business Support Services	19.2%	44.2%
541990	All Other Professional, Scientific, and Technical Services	14.2%	58.4%
541810	Advertising Agencies	8.2%	66.6%
238220	Plumbing, Heating, and Air-Conditioning Contractors	4.4%	71.0%
541613	Marketing Consulting Services	4.3%	75.3%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	4.0%	79.3%
238130	Framing Contractors	2.0%	81.3%
238210	Electrical Contractors and Other Wiring Installation Contractors	1.5%	82.7%
236115	New Single-Family Housing Construction (except For-Sale Builders)	1.4%	84.1%
621511	Medical Laboratories	1.3%	85.4%
424110	Printing and Writing Paper Merchant Wholesalers	1.3%	86.8%
541830	Media Buying Agencies	1.2%	87.9%
423830	Industrial Machinery and Equipment Merchant Wholesalers	1.2%	89.1%
484110	General Freight Trucking, Local	1.1%	90.2%

Source: CHA analysis of state data.

2. The State's Geographic Market

The courts require that a state or local government limit the reach of its race- and gender-conscious contracting program for contracts it funds to its market area.¹³¹ While it may be that the state's jurisdictional borders or other defined area

¹³¹ *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).

comprise its market area, this element of the analysis must also be empirically established.¹³²

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.¹³³ Location was determined by ZIP code as listed in the file and aggregated into counties as the geographic unit.

The Final Contract File, unconstrained by geography or product markets, revealed that 7 firms received 43.8 percent of the dollars, all in either health care or the gambling industry.¹³⁴ Four of these firms had no Illinois locations. In view of this highly concentrated market, we dropped the four out of state firms from our analysis so as to give a sharper picture of state contracting in competitive industries.

Spending in Illinois accounted for 88.3% of all contract dollars paid in the product market. Table 4 presents data on how the contract dollars were spent across the state's counties.

Table 4: Distribution of Contracts in the State of Illinois' Product Market within Illinois, by County

County	PCT TOTAL DOLLARS
Cook County	57.9%
Champaign County	28.3%
Kane County	5.9%
Sangamon County	2.0%
Dupage County	1.0%
Greene County	0.7%
Williamson County	0.6%
Other Counties	3.5%
TOTAL	100.0%

Source: CHA analysis of state data.

C. The State of Illinois' Utilization of M/FBEs in Its Market Areas

The next step was to determine the dollar value of the state's utilization of M/FBEs in its market areas constrained by geography and industry sector, as measured by payments to prime firms and associated subcontractors and

¹³² *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").

¹³³ National Disparity Study Guidelines, p. 49.

¹³⁴ These industries were NAICS codes 524114, Direct Health and Medical Insurance Carriers; 561110, Office Administrative Services; 424210, Drugs and Druggists' Sundries Merchant Wholesalers; 524114, Direct Health and Medical Insurance Carriers; 621999, All Other Miscellaneous Ambulatory Health Care Services; 561499, All Other Business Support Services; and 713290, Other Gambling Industries.

disaggregated by race and gender. Table C groups the NAICS codes into larger sectors to present a snapshot of state spending.

Table 5: Sector Distribution of Contract Dollars

Sector	Total Contract Dollars	PCT Total Contract Dollars
Construction	\$143,469,153	5.3%
Construction-Related Services	\$33,391,452	1.2%
Goods	\$205,442,278	7.5%
Health Care	\$1,911,376,273	69.9%
Services	\$438,816,817	16.1%
		0.0%
TOTAL	\$2,732,495,973	100.0%

The next essential step was to determine the dollar value of the state’s utilization of M/FBEs in its market areas constrained by geography and industry sector, as measured by payments to prime firms and subcontractors and disaggregated by race and gender. Because the state was unable to provide us with full records for payments to prime contractors and subcontractors other than firms certified as M/FBEs, 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 further developed a Master M/WBE Directory¹³⁵ based upon lists solicited from dozens of agencies and organizations. 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.

Tables 6a through 6f present data on the total contract dollars paid by the state for each NAICS code and the share the contract dollars comprise of all spending

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

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
524114	Direct Health and Medical Insurance Carriers	\$1,775,585,280	64.98%
713290	Other Gambling Industries	\$233,431,568	8.54%
621999	All Other Miscellaneous Ambulatory Health Care Services	\$118,246,448	4.33%
811198	All Other Automotive Repair and	\$74,248,472	2.72%

¹³⁵ Appendix A.

	Maintenance		
541810	Advertising Agencies	\$70,371,720	2.58%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$66,305,852	2.43%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$49,291,084	1.80%
441110	New Car Dealers	\$38,440,392	1.41%
236220	Commercial and Institutional Building Construction	\$37,364,184	1.37%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$35,615,872	1.30%
541330	Engineering Services	\$33,391,452	1.22%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$31,256,698	1.14%
541613	Marketing Consulting Services	\$23,879,150	0.87%
236115	New Single-Family Housing Construction (except For-Sale Builders)	\$14,647,449	0.54%
541990	All Other Professional, Scientific, and Technical Services	\$12,204,931	0.45%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$11,765,938	0.43%
237310	Highway, Street, and Bridge Construction	\$11,603,519	0.42%
238130	Framing Contractors	\$11,160,612	0.41%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$9,207,063	0.34%
541830	Media Buying Agencies	\$7,780,022	0.28%
424110	Printing and Writing Paper Merchant Wholesalers	\$7,749,186	0.28%
621511	Medical Laboratories	\$7,709,825	0.28%
423830	Industrial Machinery and Equipment Merchant Wholesalers	\$7,636,676	0.28%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$7,110,185	0.26%
484110	General Freight Trucking, Local	\$5,546,181	0.20%
541511	Custom Computer Programming Services	\$4,831,571	0.18%
541618	Other Management Consulting Services	\$4,135,137	0.15%
238160	Roofing Contractors	\$3,432,491	0.13%
323111	Commercial Printing (except Screen and Books)	\$3,195,335	0.12%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$2,724,536	0.10%
492110	Couriers and Express Delivery Services	\$2,594,408	0.09%
561499	All Other Business Support Services	\$2,295,765	0.08%
541850	Outdoor Advertising	\$2,261,308	0.08%
238140	Masonry Contractors	\$2,182,304	0.08%
238910	Site Preparation Contractors	\$2,107,381	0.08%
561110	Office Administrative Services	\$581,975	0.02%
424120	Stationery and Office Supplies Merchant	\$242,539	0.01%

	Wholesalers		
443142	Electronics Stores	\$160,677	0.01%
611710	Educational Support Services	\$115,148	0.00%
541612	Human Resources Consulting Services	\$85,643	0.00%
TOTAL		\$2,732,495,973	100.0%

Source: CHA analysis of state data.

Table 6b: NAICS Code Distribution of Contract Dollars, Construction

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
236220	Commercial and Institutional Building Construction	\$37,364,184.00	26.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$31,256,698.00	21.8%
236115	New Single-Family Housing Construction (except For-Sale Builders)	\$14,647,449.00	10.2%
238210	Electrical Contractors and Other Wiring Installation Contractors	\$11,765,938.00	8.2%
237310	Highway, Street, and Bridge Construction	\$11,603,519.00	8.1%
238130	Framing Contractors	\$11,160,612.00	7.8%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$9,207,063.00	6.4%
484110	General Freight Trucking, Local	\$5,546,180.50	3.9%
238160	Roofing Contractors	\$3,432,490.50	2.4%
323111	Commercial Printing (except Screen and Books)	\$3,195,334.50	2.2%
238140	Masonry Contractors	\$2,182,303.50	1.5%
238910	Site Preparation Contractors	\$2,107,380.75	1.5%
TOTAL		\$143,469,152.75	100.0%

Source: CHA analysis of state data.

Table 6c: NAICS Code Distribution of Contract Dollars, Construction Related Services

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
541330	Engineering Services	\$33,391,452	100.00%
TOTAL		\$33,391,452	100.00%

Source: CHA analysis of state data.

Table 6d: NAICS Code Distribution of Contract Dollars, Goods

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
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423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$66,305,852	32.3%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$49,291,084	24.0%
441110	New Car Dealers	\$38,440,392	18.7%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$35,615,872	17.3%
424110	Printing and Writing Paper Merchant Wholesalers	\$7,749,186	3.8%
423830	Industrial Machinery and Equipment Merchant Wholesalers	\$7,636,676	3.7%
424120	Stationery and Office Supplies Merchant Wholesalers	\$242,539	0.1%
443142	Electronics Stores	\$160,677	0.1%
TOTAL		\$205,442,278	100.0%

Source: CHA analysis of state data.

Table 6e: NAICS Code Distribution of Contract Dollars, Health Care

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
524114	Direct Health and Medical Insurance Carriers	\$1,775,585,280	92.9%
621999	All Other Miscellaneous Ambulatory Health Care Services	\$118,246,448	6.2%
621511	Medical Laboratories	\$7,709,825	0.4%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$7,110,185	0.4%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$2,724,536	0.1%
TOTAL		\$1,911,376,273	100.0%

Source: CHA analysis of state data.

Table 6f: NAICS Code Distribution of Contract Dollars, Other Services

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
713290	Other Gambling Industries	\$233,431,568	53.2%
811198	All Other Automotive Repair and Maintenance	\$74,248,472	16.9%
541810	Advertising Agencies	\$70,371,720	16.0%
541613	Marketing Consulting Services	\$23,879,150	5.4%
541990	All Other Professional, Scientific, and Technical Services	\$12,204,931	2.8%
541830	Media Buying Agencies	\$7,780,022	1.8%

541511	Custom Computer Programming Services	\$4,831,571	1.1%
541618	Other Management Consulting Services	\$4,135,137	0.9%
492110	Couriers and Express Delivery Services	\$2,594,408	0.6%
561499	All Other Business Support Services	\$2,295,765	0.5%
541850	Outdoor Advertising	\$2,261,308	0.5%
561110	Office Administrative Services	\$581,975	0.1%
611710	Educational Support Services	\$115,148	0.0%
541612	Human Resources Consulting Services	\$85,643	0.0%
TOTAL		\$438,816,817	100.0%

Source: CHA analysis of state data.

The state's spending is highly concentrated in the health care sector. Utilization of M/FBEs is also highly concentrated by sector, but not in health care; in fact, M/FBEs received only 0.4 percent of health care dollars. While not a surprising result in a sector totally dominated by a relatively small number of large, national firms, it is this sector that drives the ultimate M/FBE utilization findings. Further, M/FBEs received only 4.0 percent of the spending in the goods sector, the next largest share of total state spending.

Tables 7a through 7d also present the paid contract dollars (total dollars and share of total dollars) by race and gender and by NAICS codes for all industries, in the product market. Tables 8a through 8d present data for the construction sector. Tables 9a through 9d present data for the construction related services sector. Tables 10a through 10d present data for the goods sector. Tables 11a through 11d present data for the health care sector. Tables 12a through 12a present data for the other services sector. Minority-females were counted as minorities. We do not include Native Americans in these tables because these firms received no dollars.

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

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
236115	\$90,048	\$6,840,774	\$0	\$0	\$7,716,626
236220	\$32,179	\$31,950	\$0	\$63,500	\$37,236,555
237310	\$0	\$0	\$0	\$0	\$11,603,519
238130	\$0	\$0	\$4,993,880	\$1,312,442	\$4,854,290
238140	\$0	\$0	\$0	\$0	\$2,182,304
238160	\$506,079	\$0	\$0	\$0	\$2,926,412
238210	\$0	\$13,500	\$0	\$556,363	\$11,196,075
238220	\$0	\$0	\$0	\$2,431,728	\$28,824,969
238910	\$489,105	\$0	\$0	\$409,283	\$1,208,994
323111	\$648,660	\$0	\$238,116	\$1,311,554	\$997,005
423120	\$0	\$0	\$0	\$0	\$35,615,874
423430	\$0	\$0	\$368,788	\$33,303	\$65,903,762
423450	\$0	\$0	\$0	\$134,027	\$2,590,509
423830	\$0	\$0	\$77,306	\$37,374	\$7,521,996
424110	\$0	\$7,614,448	\$0	\$0	\$134,738
424120	\$0	\$0	\$38,934	\$0	\$203,605

424210	\$0	\$0	\$0	\$6,908,364	\$201,821
424690	\$0	\$0	\$0	\$0	\$49,291,083
441110	\$0	\$0	\$0	\$0	\$38,440,392
443142	\$0	\$0	\$0	\$0	\$160,677
484110	\$145,524	\$432,536	\$0	\$0	\$4,968,121
484230	\$1,170,063	\$0	\$0	\$181,848	\$7,855,153
492110	\$0	\$0	\$0	\$2,594,408	\$0
524114	\$0	\$0	\$0	\$0	\$1,775,585,224
541330	\$0	\$0	\$7,851,237	\$437,519	\$25,102,696
541511	\$0	\$0	\$0	\$0	\$4,831,571
541612	\$0	\$0	\$0	\$57,992	\$27,650
541613	\$885	\$0	\$0	\$8,382,594	\$15,495,670
541618	\$0	\$0	\$0	\$68,000	\$4,067,137
541810	\$7,941,774	\$3,617,583	\$0	\$0	\$58,812,364
541830	\$0	\$0	\$0	\$7,780,022	\$0
541850	\$0	\$0	\$0	\$74,477	\$2,186,831
541990	\$11,952,565	\$0	\$0	\$70,000	\$182,366
561110	\$0	\$0	\$0	\$67,454	\$514,520
561499	\$0	\$0	\$0	\$0	\$2,295,765
611710	\$0	\$0	\$0	\$0	\$115,148
621511	\$0	\$0	\$0	\$0	\$7,709,825
621999	\$0	\$0	\$0	\$0	\$118,246,448
713290	\$0	\$0	\$0	\$0	\$233,431,564
811198	\$0	\$0	\$0	\$0	\$74,248,475
TOTAL	\$22,976,882	\$18,550,791	\$13,568,261	\$32,912,252	\$2,644,487,734

Source: CHA analysis of state data.

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

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
236115	0.60%	46.70%	0.00%	0.00%	52.70%
236220	0.10%	0.10%	0.00%	0.20%	99.70%
237310	0.00%	0.00%	0.00%	0.00%	100.00%
238130	0.00%	0.00%	44.70%	11.80%	43.50%
238140	0.00%	0.00%	0.00%	0.00%	100.00%
238160	14.70%	0.00%	0.00%	0.00%	85.30%
238210	0.00%	0.10%	0.00%	4.70%	95.20%
238220	0.00%	0.00%	0.00%	7.80%	92.20%
238910	23.20%	0.00%	0.00%	19.40%	57.40%
323111	20.30%	0.00%	7.50%	41.00%	31.20%
423120	0.00%	0.00%	0.00%	0.00%	100.00%
423430	0.00%	0.00%	0.60%	0.10%	99.40%
423450	0.00%	0.00%	0.00%	4.90%	95.10%
423830	0.00%	0.00%	1.00%	0.50%	98.50%
424110	0.00%	98.30%	0.00%	0.00%	1.70%
424120	0.00%	0.00%	16.10%	0.00%	83.90%
424210	0.00%	0.00%	0.00%	97.20%	2.80%
424690	0.00%	0.00%	0.00%	0.00%	100.00%

441110	0.00%	0.00%	0.00%	0.00%	100.00%
443142	0.00%	0.00%	0.00%	0.00%	100.00%
484110	2.60%	7.80%	0.00%	0.00%	89.60%
484230	12.70%	0.00%	0.00%	2.00%	85.30%
492110	0.00%	0.00%	0.00%	100.00%	0.00%
524114	0.00%	0.00%	0.00%	0.00%	100.00%
541330	0.00%	0.00%	23.50%	1.30%	75.20%
541511	0.00%	0.00%	0.00%	0.00%	100.00%
541612	0.00%	0.00%	0.00%	67.70%	32.30%
541613	0.00%	0.00%	0.00%	35.10%	64.90%
541618	0.00%	0.00%	0.00%	1.60%	98.40%
541810	11.30%	5.10%	0.00%	0.00%	83.60%
541830	0.00%	0.00%	0.00%	100.00%	0.00%
541850	0.00%	0.00%	0.00%	3.30%	96.70%
541990	97.90%	0.00%	0.00%	0.60%	1.50%
561110	0.00%	0.00%	0.00%	11.60%	88.40%
561499	0.00%	0.00%	0.00%	0.00%	100.00%
611710	0.00%	0.00%	0.00%	0.00%	100.00%
621511	0.00%	0.00%	0.00%	0.00%	100.00%
621999	0.00%	0.00%	0.00%	0.00%	100.00%
713290	0.00%	0.00%	0.00%	0.00%	100.00%
811198	0.00%	0.00%	0.00%	0.00%	100.00%
TOTAL	0.80%	0.70%	0.50%	1.20%	96.80%

Source: CHA analysis of state data.

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

NAICS	MBE	MFBE	Non-MFBE	Total
236115	\$6,930,822	\$6,930,822	\$7,716,626	\$14,647,449
236220	\$64,129	\$127,629	\$37,236,555	\$37,364,184
237310	\$0	\$0	\$11,603,519	\$11,603,519
238130	\$4,993,880	\$6,306,322	\$4,854,290	\$11,160,612
238140	\$0	\$0	\$2,182,304	\$2,182,304
238160	\$506,079	\$506,079	\$2,926,412	\$3,432,490
238210	\$13,500	\$569,863	\$11,196,075	\$11,765,938
238220	\$0	\$2,431,728	\$28,824,969	\$31,256,698
238910	\$489,105	\$898,388	\$1,208,994	\$2,107,381
323111	\$886,776	\$2,198,330	\$997,005	\$3,195,334
423120	\$0	\$0	\$35,615,874	\$35,615,874
423430	\$368,788	\$402,091	\$65,903,762	\$66,305,853
423450	\$0	\$134,027	\$2,590,509	\$2,724,536
423830	\$77,306	\$114,680	\$7,521,996	\$7,636,676
424110	\$7,614,448	\$7,614,448	\$134,738	\$7,749,186
424120	\$38,934	\$38,934	\$203,605	\$242,539
424210	\$0	\$6,908,364	\$201,821	\$7,110,185
424690	\$0	\$0	\$49,291,083	\$49,291,083
441110	\$0	\$0	\$38,440,392	\$38,440,392

443142	\$0	\$0	\$160,677	\$160,677
484110	\$578,060	\$578,060	\$4,968,121	\$5,546,181
484230	\$1,170,063	\$1,351,911	\$7,855,153	\$9,207,063
492110	\$0	\$2,594,408	\$0	\$2,594,408
524114	\$0	\$0	\$1,775,585,224	\$1,775,585,224
541330	\$7,851,237	\$8,288,756	\$25,102,696	\$33,391,451
541511	\$0	\$0	\$4,831,571	\$4,831,571
541612	\$0	\$57,992	\$27,650	\$85,642
541613	\$885	\$8,383,479	\$15,495,670	\$23,879,150
541618	\$0	\$68,000	\$4,067,137	\$4,135,137
541810	\$11,559,357	\$11,559,357	\$58,812,364	\$70,371,722
541830	\$0	\$7,780,022	\$0	\$7,780,022
541850	\$0	\$74,477	\$2,186,831	\$2,261,308
541990	\$11,952,565	\$12,022,565	\$182,366	\$12,204,931
561110	\$0	\$67,454	\$514,520	\$581,975
561499	\$0	\$0	\$2,295,765	\$2,295,765
611710	\$0	\$0	\$115,148	\$115,148
621511	\$0	\$0	\$7,709,825	\$7,709,825
621999	\$0	\$0	\$118,246,448	\$118,246,448
713290	\$0	\$0	\$233,431,564	\$233,431,564
811198	\$0	\$0	\$74,248,475	\$74,248,475
TOTAL	\$55,095,934	\$88,008,186	\$2,644,487,734	\$2,732,495,920

Source: CHA analysis of state data.

**Table 7d: Distribution of Contract Dollars by Race and Gender,
All Sectors
(MBE, White Female, Non-M/FBE) (share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
236115	47.30%	47.30%	52.70%	100.00%
236220	0.20%	0.30%	99.70%	100.00%
237310	0.00%	0.00%	100.00%	100.00%
238130	44.70%	56.50%	43.50%	100.00%
238140	0.00%	0.00%	100.00%	100.00%
238160	14.70%	14.70%	85.30%	100.00%
238210	0.10%	4.80%	95.20%	100.00%
238220	0.00%	7.80%	92.20%	100.00%
238910	23.20%	42.60%	57.40%	100.00%
323111	27.80%	68.80%	31.20%	100.00%
423120	0.00%	0.00%	100.00%	100.00%
423430	0.60%	0.60%	99.40%	100.00%
423450	0.00%	4.90%	95.10%	100.00%
423830	1.00%	1.50%	98.50%	100.00%
424110	98.30%	98.30%	1.70%	100.00%
424120	16.10%	16.10%	83.90%	100.00%
424210	0.00%	97.20%	2.80%	100.00%
424690	0.00%	0.00%	100.00%	100.00%
441110	0.00%	0.00%	100.00%	100.00%
443142	0.00%	0.00%	100.00%	100.00%
484110	10.40%	10.40%	89.60%	100.00%

484230	12.70%	14.70%	85.30%	100.00%
492110	0.00%	100.00%	0.00%	100.00%
524114	0.00%	0.00%	100.00%	100.00%
541330	23.50%	24.80%	75.20%	100.00%
541511	0.00%	0.00%	100.00%	100.00%
541612	0.00%	67.70%	32.30%	100.00%
541613	0.00%	35.10%	64.90%	100.00%
541618	0.00%	1.60%	98.40%	100.00%
541810	16.40%	16.40%	83.60%	100.00%
541830	0.00%	100.00%	0.00%	100.00%
541850	0.00%	3.30%	96.70%	100.00%
541990	97.90%	98.50%	1.50%	100.00%
561110	0.00%	11.60%	88.40%	100.00%
561499	0.00%	0.00%	100.00%	100.00%
611710	0.00%	0.00%	100.00%	100.00%
621511	0.00%	0.00%	100.00%	100.00%
621999	0.00%	0.00%	100.00%	100.00%
713290	0.00%	0.00%	100.00%	100.00%
811198	0.00%	0.00%	100.00%	100.00%
TOTAL	2.00%	3.20%	96.80%	100.00%

Source: CHA analysis of state data.

Table 8a: Distribution of Contract Dollars by Race and Gender, Construction (total dollars)

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
236115	\$90,048	\$6,840,774	\$0	\$0	\$7,716,626
236220	\$32,179	\$31,950	\$0	\$63,500	\$37,236,555
237310	\$0	\$0	\$0	\$0	\$11,603,519
238130	\$0	\$0	\$4,993,880	\$1,312,442	\$4,854,290
238140	\$0	\$0	\$0	\$0	\$2,182,304
238160	\$506,079	\$0	\$0	\$0	\$2,926,412
238210	\$0	\$13,500	\$0	\$556,363	\$11,196,075
238220	\$0	\$0	\$0	\$2,431,728	\$28,824,969
238910	\$489,105	\$0	\$0	\$409,283	\$1,208,994
323111	\$648,660	\$0	\$238,116	\$1,311,554	\$997,005
484110	\$145,524	\$432,536	\$0	\$0	\$4,968,121
484230	\$1,170,063	\$0	\$0	\$181,848	\$7,855,153
Total	\$3,081,658	\$7,318,760	\$5,231,996	\$6,266,718	\$121,570,023

Source: CHA analysis of state data.

Table 8b: Distribution of Contract Dollars by Race and Gender, Construction (share of total dollars)

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
236115	0.60%	46.70%	0.00%	0.00%	52.70%
236220	0.10%	0.10%	0.00%	0.20%	99.70%

237310	0.00%	0.00%	0.00%	0.00%	100.00%
238130	0.00%	0.00%	44.70%	11.80%	43.50%
238140	0.00%	0.00%	0.00%	0.00%	100.00%
238160	14.70%	0.00%	0.00%	0.00%	85.30%
238210	0.00%	0.10%	0.00%	4.70%	95.20%
238220	0.00%	0.00%	0.00%	7.80%	92.20%
238910	23.20%	0.00%	0.00%	19.40%	57.40%
323111	20.30%	0.00%	7.50%	41.00%	31.20%
484110	2.60%	7.80%	0.00%	0.00%	89.60%
484230	12.70%	0.00%	0.00%	2.00%	85.30%
Total	2.1%	5.1%	3.6%	4.4%	84.7%

Source: CHA analysis of state data.

**Table 8c: Distribution of Contract Dollars by Race and Gender,
Construction
(MBE, White Female, Non-M/FBE)
(total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
236115	\$6,930,822	\$6,930,822	\$7,716,626	\$14,647,449
236220	\$64,129	\$127,629	\$37,236,555	\$37,364,184
237310	\$0	\$0	\$11,603,519	\$11,603,519
238130	\$4,993,880	\$6,306,322	\$4,854,290	\$11,160,612
238140	\$0	\$0	\$2,182,304	\$2,182,304
238160	\$506,079	\$506,079	\$2,926,412	\$3,432,490
238210	\$13,500	\$569,863	\$11,196,075	\$11,765,938
238220	\$0	\$2,431,728	\$28,824,969	\$31,256,698
238910	\$489,105	\$898,388	\$1,208,994	\$2,107,381
323111	\$886,776	\$2,198,330	\$997,005	\$3,195,334
484110	\$578,060	\$578,060	\$4,968,121	\$5,546,181
484230	\$1,170,063	\$1,351,911	\$7,855,153	\$9,207,063
Total	\$15,632,414	\$21,899,132	\$121,570,023	\$143,469,153

Source: CHA analysis of state data.

**Table 8d: Distribution of Contract Dollars by Race and Gender,
Construction
(MBE, White Female, Non-M/FBE)
(share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
236115	47.30%	47.30%	52.70%	100.00%
236220	0.20%	0.30%	99.70%	100.00%
237310	0.00%	0.00%	100.00%	100.00%
238130	44.70%	56.50%	43.50%	100.00%
238140	0.00%	0.00%	100.00%	100.00%
238160	14.70%	14.70%	85.30%	100.00%
238210	0.10%	4.80%	95.20%	100.00%

238220	0.00%	7.80%	92.20%	100.00%
238910	23.20%	42.60%	57.40%	100.00%
323111	27.80%	68.80%	31.20%	100.00%
484110	10.40%	10.40%	89.60%	100.00%
484230	12.70%	14.70%	85.30%	100.00%
Total	10.9%	15.3%	84.7%	100.0%

Source: CHA analysis of state data.

**Table 9a: Distribution of Contract Dollars by Race and Gender,
Construction Related Services
(total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
541330	\$0	\$0	\$7,851,237	\$437,519	\$25,102,696
TOTAL	\$0	\$0	\$7,851,237	\$437,519	\$25,102,696

Source: CHA analysis of state data.

**Table 9b: Distribution of Contract Dollars by Race and Gender,
Construction Related Services
(share of total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
541330	\$0	\$0	\$7,851,237	\$437,519	\$25,102,696
TOTAL	0.0%	0.0%	23.5%	1.3%	75.2%

Source: CHA analysis of state data.

**Table 9c: Distribution of Contract Dollars by Race and Gender,
Construction Related Services
(MBE, White Female, Non-M/FBE)
(total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
541330	\$7,851,237	\$8,288,756	\$25,102,696	\$33,391,451
Total	\$7,851,237	\$8,288,756	\$25,102,696	\$33,391,451

Source: CHA analysis of state data.

**Table 9d: Distribution of Contract Dollars by Race and Gender,
Construction Related Services
(MBE, White Female, Non-M/FBE)
(share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
541330	23.50%	24.80%	75.20%	100.00%
TOTAL	23.5%	24.8%	75.2%	100.0%

Source: CHA analysis of state data.

**Table10a: Distribution of Contract Dollars by Race and Gender,
Goods
(total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
423120	\$0	\$0	\$0	\$0	\$35,615,874
423430	\$0	\$0	\$368,788	\$33,303	\$65,903,762
423830	\$0	\$0	\$77,306	\$37,374	\$7,521,996
424110	\$0	\$7,614,448	\$0	\$0	\$134,738
424120	\$0	\$0	\$38,934	\$0	\$203,605
424690	\$0	\$0	\$0	\$0	\$49,291,083
441110	\$0	\$0	\$0	\$0	\$38,440,392
443142	\$0	\$0	\$0	\$0	\$160,677
TOTAL	\$0	\$7,614,448	\$485,028	\$70,677	\$197,272,127

Source: CHA analysis of state data.

**Table 10b: Distribution of Contract Dollars by Race and Gender,
Goods
(share of total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
423120	0.00%	0.00%	0.00%	0.00%	100.00%
423430	0.00%	0.00%	0.60%	0.10%	99.40%
423830	0.00%	0.00%	1.00%	0.50%	98.50%
424110	0.00%	98.30%	0.00%	0.00%	1.70%
424120	0.00%	0.00%	16.10%	0.00%	83.90%
424690	0.00%	0.00%	0.00%	0.00%	100.00%
441110	0.00%	0.00%	0.00%	0.00%	100.00%
443142	0.00%	0.00%	0.00%	0.00%	100.00%
TOTAL	0.0%	3.7%	0.2%	0.0%	96.0%

Source: CHA analysis of state data.

**Table 10c: Distribution of Contract Dollars by Race and Gender,
Goods
(MBE, White Female, Non-M/FBE)
(total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
423120	\$0	\$0	\$35,615,874	\$35,615,874
423430	\$368,788	\$402,091	\$65,903,762	\$66,305,853
423830	\$77,306	\$114,680	\$7,521,996	\$7,636,676
424110	\$7,614,448	\$7,614,448	\$134,738	\$7,749,186
424120	\$38,934	\$38,934	\$203,605	\$242,539
424690	\$0	\$0	\$49,291,083	\$49,291,083
441110	\$0	\$0	\$38,440,392	\$38,440,392
443142	\$0	\$0	\$160,677	\$160,677
Total	\$8,099,476	\$8,170,153	\$97,272,127	\$205,442,280

Source: CHA analysis of state data.

**Table 10d: Distribution of Contract Dollars by Race and Gender,
Goods
(MBE, White Female, Non-M/FBE)
(share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
423120	0.00%	0.00%	100.00%	100.00%
423430	0.60%	0.60%	99.40%	100.00%
423830	1.00%	1.50%	98.50%	100.00%
424110	98.30%	98.30%	1.70%	100.00%
424120	16.10%	16.10%	83.90%	100.00%
424690	0.00%	0.00%	100.00%	100.00%
441110	0.00%	0.00%	100.00%	100.00%
443142	0.00%	0.00%	100.00%	100.00%
TOTAL	3.9%	4.0%	96.0%	100.0%

Source: CHA analysis of state data.

**Table 11a: Distribution of Contract Dollars by Race and Gender,
Health Care (total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
423450	\$0	\$0	\$0	\$134,027	\$2,590,509
424210	\$0	\$0	\$0	\$6,908,364	\$201,821
524114	\$0	\$0	\$0	\$0	\$1,775,585,224
621511	\$0	\$0	\$0	\$0	\$7,709,825
621999	\$0	\$0	\$0	\$0	\$118,246,448
TOTAL	\$0	\$0	\$0	\$7,042,391	\$1,904,333,827

Source: CHA analysis of state data.

**Table 11b: Distribution of Contract Dollars by Race and Gender,
Health Care
(share of total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
423450	0.00%	0.00%	0.00%	4.90%	95.10%
424210	0.00%	0.00%	0.00%	97.20%	2.80%
524114	0.00%	0.00%	0.00%	0.00%	100.00%
621511	0.00%	0.00%	0.00%	0.00%	100.00%
621999	0.00%	0.00%	0.00%	0.00%	100.00%
TOTAL	0.0%	0.0%	0.0%	0.4%	99.6%

Source: CHA analysis of state data.

**Table 11c: Distribution of Contract Dollars by Race and Gender,
Health Care
(MBE, White Female, Non-M/FBE)
(total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
423450	\$0	\$134,027	\$2,590,509	\$2,724,536

424210	\$0	\$6,908,364	\$201,821	\$7,110,185
524114	\$0	\$0	\$1,775,585,224	\$1,775,585,224
621511	\$0	\$0	\$7,709,825	\$7,709,825
621999	\$0	\$0	\$118,246,448	\$118,246,448
Total	\$0	\$7,042,391	\$1,904,333,827	\$1,911,376,218

Source: CHA analysis of state data.

**Table 11d: Distribution of Contract Dollars by Race and Gender,
Health Care
(MBE, White Female, Non-M/FBE)
(share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
423450	0.00%	4.90%	95.10%	100.00%
424210	0.00%	97.20%	2.80%	100.00%
524114	0.00%	0.00%	100.00%	100.00%
621511	0.00%	0.00%	100.00%	100.00%
621999	0.00%	0.00%	100.00%	100.00%
TOTAL	0.0%	0.4%	99.6%	100.0%

Source: CHA analysis of state data.

**Table 12a: Distribution of Contract Dollars by Race and Gender,
Other Services
(total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
492110	\$0	\$0	\$0	\$2,594,408	\$0
541511	\$0	\$0	\$0	\$0	\$4,831,571
541612	\$0	\$0	\$0	\$57,992	\$27,650
541613	\$885	\$0	\$0	\$8,382,594	\$15,495,670
541618	\$0	\$0	\$0	\$68,000	\$4,067,137
541810	\$7,941,774	\$3,617,583	\$0	\$0	\$58,812,364
541830	\$0	\$0	\$0	\$7,780,022	\$0
541850	\$0	\$0	\$0	\$74,477	\$2,186,831
541990	\$11,952,565	\$0	\$0	\$70,000	\$182,366
561110	\$0	\$0	\$0	\$67,454	\$514,520
561499	\$0	\$0	\$0	\$0	\$2,295,765
611710	\$0	\$0	\$0	\$0	\$115,148
713290	\$0	\$0	\$0	\$0	\$233,431,564
811198	\$0	\$0	\$0	\$0	\$74,248,475
TOTAL	\$19,895,224	\$3,617,583	\$0	\$19,094,947	\$396,209,061

Source: CHA analysis of state data.

**Table 12b: Distribution of Contract Dollars by Race and Gender,
Other Services
(share of total dollars)**

NAICS	Black	Hispanic	Asian	White Female	Non-MFBE
492110	0.00%	0.00%	0.00%	100.00%	0.00%

541511	0.00%	0.00%	0.00%	0.00%	100.00%
541612	0.00%	0.00%	0.00%	67.70%	32.30%
541613	0.00%	0.00%	0.00%	35.10%	64.90%
541618	0.00%	0.00%	0.00%	1.60%	98.40%
541810	11.30%	5.10%	0.00%	0.00%	83.60%
541830	0.00%	0.00%	0.00%	100.00%	0.00%
541850	0.00%	0.00%	0.00%	3.30%	96.70%
541990	97.90%	0.00%	0.00%	0.60%	1.50%
561110	0.00%	0.00%	0.00%	11.60%	88.40%
561499	0.00%	0.00%	0.00%	0.00%	100.00%
611710	0.00%	0.00%	0.00%	0.00%	100.00%
713290	0.00%	0.00%	0.00%	0.00%	100.00%
811198	0.00%	0.00%	0.00%	0.00%	100.00%
TOTAL	4.5%	0.8%	0.0%	4.4%	90.3%

Source: CHA analysis of state data.

**Table 12c: Distribution of Contract Dollars by Race and Gender,
Other Services
(MBE, White Female, Non-M/FBE)
(total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
492110	\$0	\$2,594,408	\$0	\$2,594,408
541511	\$0	\$0	\$4,831,571	\$4,831,571
541612	\$0	\$57,992	\$27,650	\$85,642
541613	\$885	\$8,383,479	\$15,495,670	\$23,879,150
541618	\$0	\$68,000	\$4,067,137	\$4,135,137
541810	\$11,559,357	\$11,559,357	\$58,812,364	\$70,371,722
541830	\$0	\$7,780,022	\$0	\$7,780,022
541850	\$0	\$74,477	\$2,186,831	\$2,261,308
541990	\$11,952,565	\$12,022,565	\$182,366	\$12,204,931
561110	\$0	\$67,454	\$514,520	\$581,975
561499	\$0	\$0	\$2,295,765	\$2,295,765
611710	\$0	\$0	\$115,148	\$115,148
713290	\$0	\$0	\$233,431,564	\$233,431,564
811198	\$0	\$0	\$74,248,475	\$74,248,475
Total	\$23,512,807	\$42,607,754	\$396,209,061	\$438,816,818

Source: CHA analysis of state data.

**Table 12d: Distribution of Contract Dollars by Race and Gender,
Other Services
(MBE, White Female, Non-M/FBE) (share of total dollars)**

NAICS	MBE	MFBE	Non-MFBE	Total
492110	0.00%	100.00%	0.00%	100.00%
541511	0.00%	0.00%	100.00%	100.00%
541612	0.00%	67.70%	32.30%	100.00%
541613	0.00%	35.10%	64.90%	100.00%
541618	0.00%	1.60%	98.40%	100.00%

541810	16.40%	16.40%	83.60%	100.00%
541830	0.00%	100.00%	0.00%	100.00%
541850	0.00%	3.30%	96.70%	100.00%
541990	97.90%	98.50%	1.50%	100.00%
561110	0.00%	11.60%	88.40%	100.00%
561499	0.00%	0.00%	100.00%	100.00%
611710	0.00%	0.00%	100.00%	100.00%
713290	0.00%	0.00%	100.00%	100.00%
811198	0.00%	0.00%	100.00%	100.00%
TOTAL	5.4%	9.7%	90.3%	100.0%

Source: CHA analysis of state data.

D. The Availability of Minority- and Female-Owned Business Enterprises in the State of Illinois' Markets

1. Methodological Framework

Estimates of the availability of minority- and female-owned firms in the state's market area are a critical component of the analysis of possible barriers to equal opportunities to participate in the state's contracting activities. These availability estimates are compared to the utilization percentage of dollars received by M/FBEs to examine whether these firms receive parity.¹³⁶ Availability estimates are also crucial for the state to set narrowly tailored contract goals.

We applied the "custom census" approach to estimating availability. As recognized by the National Model Disparity Study Guidelines,¹³⁷ 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/FBEs) 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 Seventh Circuit Court of Appeals, 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

¹³⁶ For our analysis, the term "M/FBE" includes firms that are certified by the state 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. Illinois Department of Transportation*, 473 F.3d 715, 723 (7th Cir. 2007) (The "remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net.").

¹³⁷ National Disparity Study Guidelines, pp.57-58.

methods, such as bidders lists, because it seeks out firms in the state'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 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-M/FBEs 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.¹³⁸
- Fourth, it has been upheld by every court that has reviewed it, including in the successful defenses of the Illinois Department of Transportation's DBE program,¹³⁹ and the M/WBE construction program for the City of Chicago.¹⁴⁰

2. Estimation of M/FBE Availability

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

1. Created a database of representative, recent, and completed state contracts;
2. Identified the state's relevant geographic market by counties;
3. Identified the state's 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.

¹³⁸ For a detailed discussion of the role of capacity in disparity studies, see the National Disparity Study Guidelines, Appendix B, “Understanding Capacity.”

¹³⁹ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7th Cir. 2007).

¹⁴⁰ *Builders Association of Greater Chicago v. City of Chicago*, 298 F. Supp.2d 725 (N.D. Ill. 2003).

As described in sections B and C of this Chapter, we first determined the state's 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/FBE availability estimate for each NAICS code, the availability estimates for each aggregated industry and the availability estimates for all industries.

We purchased the firm information from Hoovers for the firms in the NAICS codes located in the state's 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.¹⁴¹ 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 M/WBE Master 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 Department of Central Management Services; Illinois Unified Certification Program; City of Chicago; Cook County; Illinois State Black Chamber of Commerce; and many others. In total, we contacted 119 organizations for this Study. The resulting list of minority and female businesses is comprehensive and provides data to supplement the Hoovers database 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 the state's product market area;
2. Identify the number of minority-owned firms in these NAICS codes;

¹⁴¹ The variable is labeled: "Is Minority Owned" and values for the variable can be either "yes" or "no".

3. Sort the Master Directory by each 6-digit NAICS code in the state's 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:
 6. Blacks
 7. Hispanics
 8. Asians
 9. Native Americans; and
10. 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

Based upon the results of these classifications and further assignments, we estimated the availability of M/FBEs as a percentage of total firms. M/FBE “unweighted” availability is defined as the number of M/FBEs divided by the total number of firms in the state’s market area. It is “unweighted” because it is a headcount that does not factor in the percentage of state dollars actually spent in each NAICS code.

Tables 13a through 13f present data on the unweighted availability by race and gender and by NAICS codes in the product market for all industries, the construction sector, the construction related services sector, the goods sector, the health care sector, and the other services sector.

**Table 13a: Unweighted Availability,
All Sectors
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
236115	1.4%	0.5%	0.3%	0.0%	2.3%	2.3%	4.5%	95.5%	100.0%
236220	6.2%	3.9%	2.5%	0.2%	9.0%	12.9%	21.9%	78.1%	100.0%
237310	3.2%	1.6%	1.1%	0.2%	5.6%	6.2%	11.8%	88.2%	100.0%
238130	28.6%	26.5%	8.2%	0.0%	10.2%	63.3%	73.5%	26.5%	100.0%
238140	2.9%	1.8%	0.7%	0.1%	6.1%	5.5%	11.5%	88.5%	100.0%
238160	1.8%	0.8%	0.5%	0.1%	4.5%	3.2%	7.7%	92.3%	100.0%
238210	1.9%	0.9%	0.6%	0.1%	7.9%	3.6%	11.5%	88.5%	100.0%
238220	1.8%	0.9%	0.4%	0.1%	5.0%	3.1%	8.1%	91.9%	100.0%
238910	1.8%	0.9%	0.6%	0.1%	6.5%	3.4%	9.9%	90.1%	100.0%
323111	2.4%	1.2%	0.8%	0.1%	12.1%	4.6%	16.7%	83.3%	100.0%
423120	2.3%	1.1%	0.7%	0.2%	4.1%	4.3%	8.4%	91.6%	100.0%
423430	4.5%	2.2%	3.3%	0.2%	9.7%	10.2%	19.9%	80.1%	100.0%
423450	6.4%	2.8%	3.0%	0.3%	10.7%	12.5%	23.1%	76.9%	100.0%
423830	1.6%	0.8%	0.5%	0.1%	5.7%	3.1%	8.8%	91.2%	100.0%
424110	4.3%	4.9%	1.8%	0.1%	12.5%	11.1%	23.6%	76.4%	100.0%
424120	4.0%	1.6%	1.2%	0.2%	16.0%	7.0%	23.0%	77.0%	100.0%
424210	3.8%	1.6%	1.5%	0.2%	11.0%	7.1%	18.1%	81.9%	100.0%
424690	2.6%	1.0%	0.8%	0.1%	7.3%	4.6%	11.9%	88.1%	100.0%
441110	0.5%	0.2%	0.1%	0.0%	1.4%	0.9%	2.4%	97.6%	100.0%
443142	1.7%	0.9%	0.6%	0.1%	4.4%	3.3%	7.8%	92.2%	100.0%
484110	1.8%	0.9%	0.4%	0.1%	4.0%	3.2%	7.2%	92.8%	100.0%
484230	6.1%	1.9%	1.4%	0.2%	9.6%	9.6%	19.1%	80.9%	100.0%
492110	3.8%	1.5%	2.3%	0.2%	7.1%	7.8%	14.9%	85.1%	100.0%
524114	2.8%	0.7%	0.4%	0.1%	9.3%	4.0%	13.2%	86.8%	100.0%
541330	4.4%	2.3%	1.6%	0.3%	4.8%	8.6%	13.4%	86.6%	100.0%
541511	4.3%	2.1%	1.3%	0.3%	5.3%	8.0%	13.3%	86.7%	100.0%
541612	10.1%	3.1%	1.8%	0.3%	21.1%	15.3%	36.4%	63.6%	100.0%
541613	3.3%	1.7%	0.9%	0.1%	12.6%	6.0%	18.6%	81.4%	100.0%
541618	2.0%	0.9%	0.5%	0.1%	5.4%	3.5%	8.9%	91.1%	100.0%
541810	2.6%	1.5%	0.7%	0.1%	12.9%	4.9%	17.8%	82.2%	100.0%

541830	2.5%	1.2%	0.7%	0.2%	16.3%	4.7%	20.9%	79.1%	100.0%
541850	3.1%	1.1%	0.7%	0.2%	8.4%	5.0%	13.4%	86.6%	100.0%
541990	0.9%	0.4%	0.3%	0.0%	5.0%	1.6%	6.6%	93.4%	100.0%
561110	1.5%	0.7%	0.4%	0.1%	3.9%	2.7%	6.6%	93.4%	100.0%
561499	0.9%	0.4%	0.3%	0.1%	4.4%	1.6%	6.0%	94.0%	100.0%
611710	10.1%	3.9%	2.1%	0.5%	17.3%	16.5%	33.8%	66.2%	100.0%
621511	2.9%	1.5%	1.3%	0.2%	7.9%	5.9%	13.8%	86.2%	100.0%
621999	0.4%	0.2%	0.1%	0.0%	4.1%	0.7%	4.7%	95.3%	100.0%
713290	1.9%	0.9%	0.6%	0.1%	7.1%	3.6%	10.7%	89.3%	100.0%
811198	1.3%	0.5%	0.3%	0.1%	3.2%	2.3%	5.4%	94.6%	100.0%
TOTAL	2.0%	1.0%	0.6%	0.1%	5.5%	3.7%	9.2%	90.8%	100.0%

Source: CHA analysis of state data.

**Table 13b: Unweighted Availability,
Construction
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
236115	1.4%	0.5%	0.3%	0.0%	2.3%	2.3%	4.5%	95.5%	100.0%
236220	6.2%	3.9%	2.5%	0.2%	9.0%	12.9%	21.9%	78.1%	100.0%
237310	3.2%	1.6%	1.1%	0.2%	5.6%	6.2%	11.8%	88.2%	100.0%
238130	28.6%	26.5%	8.2%	0.0%	10.2%	63.3%	73.5%	26.5%	100.0%
238140	2.9%	1.8%	0.7%	0.1%	6.1%	5.5%	11.5%	88.5%	100.0%
238160	1.8%	0.8%	0.5%	0.1%	4.5%	3.2%	7.7%	92.3%	100.0%
238210	1.9%	0.9%	0.6%	0.1%	7.9%	3.6%	11.5%	88.5%	100.0%
238220	1.8%	0.9%	0.4%	0.1%	5.0%	3.1%	8.1%	91.9%	100.0%
238910	1.8%	0.9%	0.6%	0.1%	6.5%	3.4%	9.9%	90.1%	100.0%
323111	2.4%	1.2%	0.8%	0.1%	12.1%	4.6%	16.7%	83.3%	100.0%
484110	1.8%	0.9%	0.4%	0.1%	4.0%	3.2%	7.2%	92.8%	100.0%
484230	6.1%	1.9%	1.4%	0.2%	9.6%	9.6%	19.1%	80.9%	100.0%
TOTAL	2.1%	1.0%	0.6%	0.1%	5.0%	3.8%	8.9%	91.1%	100.0%

Source: CHA analysis of state data.

**Table 13c: Unweighted Availability,
Construction Related Services
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
541330	4.4%	2.3%	1.6%	0.3%	4.8%	8.6%	13.4%	86.6%	100.0%
TOTAL	4.4%	2.3%	1.6%	0.3%	4.8%	8.6%	13.4%	86.6%	100.0%

Source: CHA analysis of state data

**Table13d: Unweighted Availability,
Goods
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
423120	2.3%	1.1%	0.7%	0.2%	4.1%	4.3%	8.4%	91.6%	100.0%
423430	4.5%	2.2%	3.3%	0.2%	9.7%	10.2%	19.9%	80.1%	100.0%
423830	1.6%	0.8%	0.5%	0.1%	5.7%	3.1%	8.8%	91.2%	100.0%
424110	4.3%	4.9%	1.8%	0.1%	12.5%	11.1%	23.6%	76.4%	100.0%
424120	4.0%	1.6%	1.2%	0.2%	16.0%	7.0%	23.0%	77.0%	100.0%
424690	2.6%	1.0%	0.8%	0.1%	7.3%	4.6%	11.9%	88.1%	100.0%
441110	0.5%	0.2%	0.1%	0.0%	1.4%	0.9%	2.4%	97.6%	100.0%
443142	1.7%	0.9%	0.6%	0.1%	4.4%	3.3%	7.8%	92.2%	100.0%
TOTAL	1.9%	0.9%	0.7%	0.1%	5.2%	3.7%	8.9%	91.1%	100.0%

Source: CHA analysis of state data.

**Table 13e: Unweighted Availability,
Health Care
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
423450	6.4%	2.8%	3.0%	0.3%	10.7%	12.5%	23.1%	76.9%	100.0%
424210	3.8%	1.6%	1.5%	0.2%	11.0%	7.1%	18.1%	81.9%	100.0%
524114	2.8%	0.7%	0.4%	0.1%	9.3%	4.0%	13.2%	86.8%	100.0%
621511	2.9%	1.5%	1.3%	0.2%	7.9%	5.9%	13.8%	86.2%	100.0%
621999	0.4%	0.2%	0.1%	0.0%	4.1%	0.7%	4.7%	95.3%	100.0%
TOTAL	1.7%	0.8%	0.7%	0.1%	5.9%	3.2%	9.1%	90.9%	100.0%

Source: CHA analysis of state data.

**Table 13f: Unweighted Availability,
Other Services
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
492110	3.8%	1.5%	2.3%	0.2%	7.1%	7.8%	14.9%	85.1%	100.0%
541511	4.3%	2.1%	1.3%	0.3%	5.3%	8.0%	13.3%	86.7%	100.0%
541612	10.1%	3.1%	1.8%	0.3%	21.1%	15.3%	36.4%	63.6%	100.0%
541613	3.3%	1.7%	0.9%	0.1%	12.6%	6.0%	18.6%	81.4%	100.0%
541618	2.0%	0.9%	0.5%	0.1%	5.4%	3.5%	8.9%	91.1%	100.0%
541810	2.6%	1.5%	0.7%	0.1%	12.9%	4.9%	17.8%	82.2%	100.0%

541830	2.5%	1.2%	0.7%	0.2%	16.3%	4.7%	20.9%	79.1%	100.0%
541850	3.1%	1.1%	0.7%	0.2%	8.4%	5.0%	13.4%	86.6%	100.0%
541990	0.9%	0.4%	0.3%	0.0%	5.0%	1.6%	6.6%	93.4%	100.0%
561110	1.5%	0.7%	0.4%	0.1%	3.9%	2.7%	6.6%	93.4%	100.0%
561499	0.9%	0.4%	0.3%	0.1%	4.4%	1.6%	6.0%	94.0%	100.0%
611710	10.1%	3.9%	2.1%	0.5%	17.3%	16.5%	33.8%	66.2%	100.0%
713290	1.9%	0.9%	0.6%	0.1%	7.1%	3.6%	10.7%	89.3%	100.0%
811198	1.3%	0.5%	0.3%	0.1%	3.2%	2.3%	5.4%	94.6%	100.0%
TOTAL	1.9%	0.9%	0.5%	0.1%	5.9%	3.4%	9.2%	90.8%	100.0%

Source: CHA analysis of state 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 the state's spending in each code. Tables 14a through 14f present these weights.

Table 14a: Share of State Spending by NAICS Code, All Sectors

NAICS	NAICS Code Description	Pct Total Contract Dollars
524114	Direct Health and Medical Insurance Carriers	64.98%
713290	Other Gambling Industries	8.54%
621999	All Other Miscellaneous Ambulatory Health Care Services	4.33%
811198	All Other Automotive Repair and Maintenance	2.72%
541810	Advertising Agencies	2.58%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	2.43%
424690	Other Chemical and Allied Products Merchant Wholesalers	1.80%
441110	New Car Dealers	1.41%
236220	Commercial and Institutional Building Construction	1.37%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	1.30%
541330	Engineering Services	1.22%
238220	Plumbing, Heating, and Air-Conditioning Contractors	1.14%
541613	Marketing Consulting Services	0.87%
236115	New Single-Family Housing Construction (except For-Sale Builders)	0.54%
541990	All Other Professional, Scientific, and Technical Services	0.45%

238210	Electrical Contractors and Other Wiring Installation Contractors	0.43%
237310	Highway, Street, and Bridge Construction	0.42%
238130	Framing Contractors	0.41%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	0.34%
541830	Media Buying Agencies	0.28%
424110	Printing and Writing Paper Merchant Wholesalers	0.28%
621511	Medical Laboratories	0.28%
423830	Industrial Machinery and Equipment Merchant Wholesalers	0.28%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.26%
484110	General Freight Trucking, Local	0.20%
541511	Custom Computer Programming Services	0.18%
541618	Other Management Consulting Services	0.15%
238160	Roofing Contractors	0.13%
323111	Commercial Printing (except Screen and Books)	0.12%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.10%
492110	Couriers and Express Delivery Services	0.09%
561499	All Other Business Support Services	0.08%
541850	Outdoor Advertising	0.08%
238140	Masonry Contractors	0.08%
238910	Site Preparation Contractors	0.08%
561110	Office Administrative Services	0.02%
424120	Stationery and Office Supplies Merchant Wholesalers	0.01%
443142	Electronics Stores	0.01%
611710	Educational Support Services	0.00%
541612	Human Resources Consulting Services	0.00%
TOTAL		100.0%

Source: CHA analysis of state data.

Table 14b: Share of State Spending by NAICS Code, Construction

NAICS	NAICS Code Description	Pct Total Contract Dollars
236220	Commercial and Institutional Building Construction	26.0%
238220	Plumbing, Heating, and Air-Conditioning Contractors	21.8%
236115	New Single-Family Housing Construction (except For-Sale Builders)	10.2%

238210	Electrical Contractors and Other Wiring Installation Contractors	8.2%
237310	Highway, Street, and Bridge Construction	8.1%
238130	Framing Contractors	7.8%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	6.4%
484110	General Freight Trucking, Local	3.9%
238160	Roofing Contractors	2.4%
323111	Commercial Printing (except Screen and Books)	2.2%
238140	Masonry Contractors	1.5%
238910	Site Preparation Contractors	1.5%
TOTAL		100.0%

Source: CHA analysis of state data.

Table 14c: Share of State Spending by NAICS Code, Construction Related Services

NAICS	NAICS Code Description	Pct Total Contract Dollars
541330	Engineering Services	100.00%
TOTAL		100.00%

Source: CHA analysis of state data.

Table 14d Share of State Spending by NAICS Code, Goods

NAICS	NAICS Code Description	Pct Total Contract Dollars
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	32.3%
424690	Other Chemical and Allied Products Merchant Wholesalers	24.0%
441110	New Car Dealers	18.7%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	17.3%
424110	Printing and Writing Paper Merchant Wholesalers	3.8%
423830	Industrial Machinery and Equipment Merchant Wholesalers	3.7%

424120	Stationery and Office Supplies Merchant Wholesalers	0.1%
443142	Electronics Stores	0.1%
TOTAL		100.0%

Source: CHA analysis of state data.

Table 14e: Share of State Spending by NAICS Code, Health Care

NAICS	NAICS Code Description	Pct Total Contract Dollars
524114	Direct Health and Medical Insurance Carriers	92.9%
621999	All Other Miscellaneous Ambulatory Health Care Services	6.2%
621511	Medical Laboratories	0.4%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.4%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0.1%
TOTAL		100.0%

Source: CHA analysis of state data.

Table 14f: Share of State Spending by NAICS Code, Other Services

NAICS	NAICS Code Description	Pct Total Contract Dollars
713290	Other Gambling Industries	53.2%
811198	All Other Automotive Repair and Maintenance	16.9%
541810	Advertising Agencies	16.0%
541613	Marketing Consulting Services	5.4%
541990	All Other Professional, Scientific, and Technical Services	2.8%
541830	Media Buying Agencies	1.8%
541511	Custom Computer Programming Services	1.1%
541618	Other Management Consulting Services	0.9%
492110	Couriers and Express Delivery Services	0.6%
561499	All Other Business Support Services	0.5%
541850	Outdoor Advertising	0.5%
561110	Office Administrative Services	0.1%
611710	Educational Support Services	0.0%

541612	Human Resources Consulting Services	0.0%
TOTAL		100.0%

Source: CHA analysis of state data.

Tables 15a through 15f present the final estimates of the weighted averages of all the individual 6-digit level availability estimates in the state's market area.

**Table 15a: Aggregated Weighted Availability,
All Sectors
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	2.7%	1.0%	0.6%	0.1%	8.4%	4.4%	12.8%	87.2%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

**Table 15b: Aggregated Weighted Availability,
Construction
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	5.4%	3.8%	1.7%	0.1%	6.9%	11.0%	17.9%	82.1%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

**Table 15c: Aggregated Weighted Availability,
Construction Related Services
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	4.4%	2.3%	1.6%	0.3%	4.8%	8.6%	13.4%	86.6%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

**Table 15d: Aggregated Weighted Availability,
Goods
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	2.8%	1.4%	1.5%	0.1%	6.6%	5.9%	12.4%	87.6%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

**Table 15e: Aggregated Weighted Availability,
Health Care
(total dollars)**

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
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TOTAL	2.6%	0.7%	0.4%	0.1%	9.0%	3.8%	12.8%	87.2%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

Table 15f: Aggregated Weighted Availability, Other Services (total dollars)

NAICS	Black	Hispanic	Asian	Native American	White Female	MBE	MFBE	Non-MFBE	TOTAL
TOTAL	2.0%	1.0%	0.6%	0.1%	7.7%	3.7%	11.5%	88.5%	100.0%

Source: CHA analysis of state data, Hoovers; CHA Master Directory.

E. Analysis of Race and Gender Disparities in the State of Illinois’ Utilization of Minority- and Female-Owned Businesses

To meet the strict scrutiny requirement that the state consider evidence of disparities to establish its compelling interest in remedying discrimination in its market area, we next calculated disparity ratios for total M/FBE utilization compared to the total weighted availability of M/FBEs, measured in dollars paid.

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.¹⁴² A statistically significant disparity means that an outcome is unlikely to have occurred as the result of random chance alone. The greater the statistical significance, the smaller the probability that it resulted from random chance alone. A more in depth discussion of statistical significance is provided in Appendix D.

Tables 16a through 156f present the results of this disparity analysis by demographic group and by industry sectors. MBEs, FBEs, and M/FBEs as a group, continue to suffer large disparities in utilization on all industry sectors combined, and in the goods and health care sectors, even with the application of the BEP program. White females suffer large disparities in all sectors. While some racial and ethnic groups have achieved parity in a few sectors, non-M/FBEs benefit from positive disparities overall and in all sectors except construction related services, where the disparity is not substantively large. These results support the inference that barriers based on race and gender continue to impede equal opportunities for all groups on the full range of state projects. Without the continued implementation of race- and gender-conscious measures, it is likely that these identified disparities would continue and worsen,

¹⁴² 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.”).

suggesting that the state would then function as a passive participant in marketplace discrimination.

Table 16a: Disparity Ratios by Demographic Group, All Sectors (total dollars)

Demographic Group	Disparity Ratio
Black	29.5%
Hispanic	72.8%
Asian	83.0%
Native American	0.0%
White Female	14.3%
MBE	45.7%
MFBE	25.0%
Non-MFBE	111.0%

Source: CHA analysis of state data.

Table 16b: Disparity Ratios by Demographic Group, Construction

Demographic Group	Disparity Ratio
Black	39.6%
Hispanic	134.6%
Asian	216.4%
Native American	0.0%
White Female	63.4%
	98.8%
MBE	
MFBE	85.2%
Non-MFBE	103.2%

Source: CHA analysis of state data.

Table 16c: Disparity Ratios by Demographic Group, Construction Related Services

Demographic Group	Disparity Ratio
Black	0.0%
Hispanic	0.0%
Asian	1462.4%
Native American	0.0%
White Female	27.1%
MBE	273.1%
MFBE	184.7%
Non-MFBE	86.8%

Source: CHA analysis of state data

**Table16d: Disparity Ratios by Demographic Group,
Goods**

Demographic Group	Disparity Ratio
Black	0.0%
Hispanic	263.4%
Asian	15.6%
Native American	0.0%
White Female	0.5%
MBE	67.3%
MFBE	32.0%
Non-MFBE	109.7%

Source: CHA analysis of state data.

**Table 16e: Disparity Ratios by Demographic Group,
Health Care**

Demographic Group	Disparity Ratio
Black	0.0%
Hispanic	0.0%
Asian	0.0%
Native American	0.0%
White Female	4.1%
MBE	0.0%
MFBE	2.9%
Non-MFBE	114.2%

Source: CHA analysis of state data.

**Table 16f: Disparity Ratios by Demographic Group,
Other Services**

Demographic Group	Disparity Ratio
Black	222.8%
Hispanic	82.8%
Asian	0.0%
Native American	0.0%
White Female	56.2%
MBE	143.6%
MFBE	84.6%
Non-MFBE	102.0%

Source: CHA analysis of state data

V. Analysis of Disparities in the Illinois Economy

A. Introduction

A key element to determine the need for government intervention in the sectors of the economy where the State of Illinois procures goods and services is an analysis of the extent of disparities in those sectors independent of the State's intervention through its contracting affirmative action program. 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, 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.¹⁴³

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 the State's marketplace.¹⁴⁴

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.¹⁴⁵

Using both data sets, we found disparities for minorities and women across most industry sectors in the State of Illinois' marketplace.

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

¹⁴³ See the discussion in Chapter II of the legal standards applicable to contracting affirmative action programs.

¹⁴⁴ 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.

¹⁴⁵ Data from 2007-2011 American Community Survey are the most recent for a five year period.

more than 100% indicates an overutilization of a demographic group. Table 1 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.¹⁴⁶

**Table 1. 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	11.2%	20.3%	28.0%
White Women	14.6%	20.5%	28.1%
Not Non-White/Not White Women	161.0%	124.3%	122.0%

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.¹⁴⁷ 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, 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 2. Parity would exist if the figures in Table 2 were 0.0%; in other words, non-Whites and White women would be utilized identical to White men. When the Table indicates that the wage differential between Blacks and White men is -34.3%, for example, this means that wages received by Blacks are 34.3% less than wages received by similar White men. Because of these

¹⁴⁶ The Survey of Business Owners data available via American Fact Finder do not permit the use of regression analysis on these results.

¹⁴⁷ See Appendix A for more information on multiple regression statistical analysis.

disparities, the rates at which these groups formed businesses were lower than the business formation rate of similarly-situated White men.

**Table 2. Economic Outcome Differentials of Minorities and White Women Relative to White Males
All Industries,
American Community Survey, 2007-2011**

Demographic Group	Wages Differentials Relative to White Men (% Change)	Business Earnings Relative to White Men (% Change)
Black	-34.3%	-44.4%
Hispanics	-12.1%	-25.5%
Native American	-32.6%	-49.3%
Asian/Pacific Islander	-30.5%	-24.2%
Other	-23.4%	-12.3%
White Women	-33.9%	-53.2%

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 3a presents these results. The Table indicates that White men have higher business formation rates compared to non-Whites and White women. Table 3b explores the same question but utilizes multiple regression analysis to control for important factors beyond race and gender. This Table indicates that non-Whites and White women are less likely to form businesses compared to similarly situated White men. For instance, Blacks are 4.9% 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 Illinois economy.

**Table 3a. Business Formation Rates
All Industries,
American Community Survey, 2007-2011**

Demographic Group	Business Formation Rates
Black	4.5%
Latino	4.7%
Native American	8.6%
Asian/Pacific Islander	8.4%
Other	5.9%
Non-White	5.2%
White Women	6.9%
Non-White Male	6.0%
White Male	11.2%

Source: CHA calculations from the American Community Survey

**Table 3b. Business Formation Probabilities Relative to White Males
All Industries,
American Community Survey, 2007-2011**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-4.9%
Latino	-3.2%
Native American	-3.0%
Asian/Pacific Islander	-1.4%
Other	-0.9%
White Women	-2.6%

Source: CHA calculations from the American Community Survey

Overall, the results of our analyses of the Illinois 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 Illinois marketplace, the State of Illinois will function as a passive participant in these potentially discriminatory outcomes.¹⁴⁸

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.¹⁴⁹ 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:^{150, 151}

¹⁴⁸ 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.”

¹⁴⁹ See <http://www.census.gov/econ/sbo/about.html> for more information on the Survey.

¹⁵⁰ Race and gender labels reflect the categories used by the Census Bureau.

- 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 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 where the State of Illinois purchases, we analyzed economy-wide SBO data on the following sectors:

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

¹⁵¹ 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.

- 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 the State’s contract data in Chapters 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.¹⁵² We therefore report 2-digit data.

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

Table 4. 2-Digit NAICS Code Definition of Sector

SBO Sector Label	2-Digit NAICS Codes
Construction	23
Professional, Scientific, and Technical Services ¹⁵³	54
Information	51
Goods	31, 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 Illinois. 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

¹⁵² 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.

¹⁵³ This sector includes (but is broader than just) construction-related services. It is impossible to narrow this category to construction-related services without losing the capacity to conduct race and gender specific analyses.

- The 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 5 presents data for the four basic non-White racial groups:

- Black
- Latino
- Native American
- Asian

Panel B of Table 5 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.¹⁵⁴

¹⁵⁴ 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

Table 5. 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	9.3%	0.5%	1.5%	0.3%	0.8%	0.6%
Latino	5.0%	0.7%	3.0%	0.6%	1.5%	0.9%
Native American	0.3%	0.0%	0.2%	0.0%	0.1%	0.0%
Asian	5.2%	1.2%	6.3%	1.1%	1.9%	1.4%
Panel B: Distribution of All Firms						
Non-White	19.8%	2.2%	9.6%	2.0%	3.9%	2.7%
White Women	21.3%	3.1%	13.8%	2.8%	5.4%	3.9%
White Men	42.3%	25.4%	50.5%	24.7%	32.2%	29.4%
Equally Non-White & White	1.0%	0.1%	0.4%	0.1%	0.2%	0.2%
Equally Women & Men	12.1%	3.1%	14.8%	2.8%	5.4%	3.5%
Firms Not Classifiable	3.5%	66.0%	10.9%	67.6%	52.9%	60.3%
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 6 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.¹⁵⁵ 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 7:

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

¹⁵⁵ 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.

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

For example, the disparity ratio of sales and receipts share for all firms over the share of total number of all firms for Black firms is 13.9% (as shown in Table 7). This is derived by taking the Black share of sales and receipts for all firms (1.3%) and dividing it by the Black share of total number of all firms (9.6%) that are presented in Table 6. 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.¹⁵⁶ 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.¹⁵⁷

¹⁵⁶ 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.").

¹⁵⁷ Because the data in Tables 6 and 7 are presented for descriptive purposes, significance tests on these results are not conducted.

Table 6. Demographic Distribution of Sales and Payroll Data – Aggregated Groups
All Industries, 2007

	Total Number of Firms (All Firms)	Sales & Receipts (All Firms) (\$1,000 or greater)	Number of Firms with Paid Employees (Employer Firms)	Sales & Receipts Firms with Paid Employees (Employer Firms) (\$1,000 or greater)	Number of Paid Employees	Annual payroll (\$1,000 or greater)
Black	9.6%	1.3%	1.7%	1.1%	1.8%	1.5%
Latino	5.2%	2.1%	3.4%	1.9%	3.1%	2.3%
Native American	0.3%	0.1%	0.2%	0.1%	0.2%	0.1%
Asian	5.3%	3.6%	7.0%	3.5%	4.0%	3.4%
Non-White	20.6%	6.5%	10.8%	6.0%	8.2%	6.8%
White Women	22.1%	9.2%	15.4%	8.7%	11.4%	9.7%
Not Non-White/Not White Women	57.3%	84.3%	73.8%	85.3%	80.4%	83.5%
All Firms	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

Table 7. 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	13.9%	62.7%	84.7%
Latino	39.6%	55.6%	66.4%
Native American	39.6%	59.9%	60.6%
Asian	68.2%	50.0%	48.5%
Panel B: Disparity Ratios for All Firms			
Non-Whites	11.2%	20.3%	28.0%
White Women	14.6%	20.5%	28.1%
Not Non-White/Not White Women	161.0%	124.3%	122.0%

All Firms	100.0%	100.0%	100.0%
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Source: CHA calculations from Survey of Business Owners

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

2. Construction

Of the 18 disparity ratios for non-White firms and White women firms presented in Table 8, 14 fall under the 80% threshold.

Table 8. 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	25.8%	100.1%	108.4%
Latino	29.7%	50.3%	66.6%
Native American	35.0%	63.2%	76.4%
Asian	56.0%	64.4%	79.0%
Panel B: Disparity Ratios for All Firms			
Non-White	29.3%	62.9%	78.4%
White Women	86.7%	70.4%	96.4%
Not Non-White/Not White Women	110.6%	105.1%	101.5%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

3. Professional, Scientific and Technical Services

Table 9 presents disparity ratios in this sector. Because of the dearth of Native American firms in this sector, no analysis is provided for this demographic group. All of the available disparity ratios for non-White firms and White women firms presented in Table 9 are under the 80% threshold.¹⁵⁸

Table 9. 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	17.2%	49.6%	53.1%
Latino	27.8%	44.6%	36.9%
Native American	S	S	S
Asian	47.8%	46.2%	46.4%
Panel B: Disparity Ratios for All Firms			
Non-White	30.1%	48.1%	47.2%
White Women	26.8%	30.9%	29.1%
Not Non-White/Not White Women	142.6%	120.3%	120.8%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

¹⁵⁸ The values of “S” in Tables 9 – 12 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>.

4. Information

Once again, the small number of Native American firms in this sector meant that no analysis is provided for this demographic group. In addition, the SBO was unable to provide reliable estimates for the firms in this sector that are equally owned by non-Whites and Whites. Thirteen of the available 15 disparity ratios for non-White firms and White women firms presented in Table 10 fall below the 80% threshold.

Table 10. 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	21.3%	145.9%	262.0%
Latino	5.4%	16.3%	17.4%
Native American	S	S	S
Asian	18.3%	21.3%	25.9%
Panel B: Disparity Ratios for All Firms			
Non-White	16.4%	48.5%	79.0%
White Women	6.0%	7.8%	10.2%
Not Non-White/Not White Women	150.4%	119.4%	117.1%
All Firms	100.0%	100.0%	100.0%

Source:

calculations from Survey of Business Owners

CHA

5. Services

The SBO was unable to provide reliable estimates for the firms that are equally owned by non-Whites and Whites and Native American firms in this sector; consequently, no analysis is provided for these demographic groups. In addition, estimates could not be made for Asian-owned firms in four of the six categories and Latino-owned firms in two of the four categories. Of the available 12 disparity ratios for non-White firms and White women firms presented in Table 11, all fall below the 80% threshold.

**Table 11. 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	5.5%	19.9%	28.1%
Latino	18.2%	10.2%	S
Native American	S	S	S
Asian	28.2%	S	S
Panel B: Disparity Ratios for All Firms			
Non-White	12.7%	21.2%	27.6%
White Women	14.6%	18.6%	26.3%
Not Non-White/Not White Women	179.1%	128.9%	126.3%
All Firms	100.0%	100.0%	100.0%

Source: CHA calculations from Survey of Business Owners

6. Goods

The SBO was unable to provide reliable estimates for the firms that are equally owned by non-Whites and Whites and Native American firms in this sector; consequently, no analysis is provided for these demographic groups. All of the disparity ratios for non-White firms and White women firms presented in Table 12 fall below the 80% threshold.

**Table 12. 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	5.3%	23.0%	30.4%
Latino	11.6%	20.0%	26.9%
Native American	S	S	S
Asian	18.5%	14.2%	14.7%
Panel B: Disparity Ratios for All Firms			
Non-White	11.9%	17.1%	19.5%
White Women	10.6%	20.5%	29.8%
Not Non-White/Not White Women	157.0%	122.9%	121.1%
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 2007-2011 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 the State’s Business Enterprise 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.¹⁵⁹ 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 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.

¹⁵⁹ For more information about the ACS PUMS, please see <http://www.census.gov/acs/>.

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.¹⁶⁰

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

- All Industries
- Construction
- 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 Illinois

a. Business Formation Rates

Table 13 presents business formation rates in the Illinois economy by demographic groups.

¹⁶⁰ Most social scientists do not endorse utilizing a confidence level of less than 95%. Appendix C explains more about statistical significance.

Table 13. Business Formation Rates, Illinois

All Industries, 2007-2011

Demographic Group	Business Formation Rates
Black	4.5%
Latino	4.7%
Native American	8.6%
Asian/Pacific Islander	8.4%
Other	5.9%
Non-White	5.2%
White Women	6.9%
Non-White Male	6.0%
White Male	11.2%

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.¹⁶¹ The basic question is: how does the probability of forming a business vary as factors such as race, gender, etc. vary?

Table 14 presents the results of the probit analysis for the Illinois economy.

Table 14. Business Formation Probability Differentials for Selected Groups Relative to White Men

All Industries, 2007-2011

Demographic Group	Probability of Forming a Business Relative to White Men
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¹⁶¹ 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 as wages might have any non-negative value. For a more extensive discussion of probit regression analysis, see Appendix B.

Black	-4.9% ^{***}
Latino	-3.2% ^{***}
Native American	-3.0% ^{***}
Asian/Pacific Islander	-1.4% ^{***}
Other	-0.9% ^{***}
White Women	-2.6% ^{***}

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 Illinois are less likely than White men to form businesses even after controlling for key factors. The reduction in probability ranges from 0.9% to 4.9%. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 15 presents the findings from the wage and salary income regression

Table 15. Wage Differentials for Selected Groups Relative to White Men

All Industries, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-34.3% ^{***}
Latino	-12.1% ^{***}
Native American	-32.6% ^{***}
Asian/Pacific Islander	-30.5% ^{**}
Other	-23.4% ^{***}
White Women	-33.9% ^{**}

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

analysis examining the Illinois economy. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, White women, Asian/Pacific Islanders and Others in Illinois earn less than White men in the overall economy. Estimates of the coefficients for Black, Latino, Native American, and Other are statistically significant at the 0.001 level. Estimates of the coefficients for Asian/Pacific Islander and White Women are statistically significant at the 0.01 level. For example, we are 99.9% confident that wages for Blacks in Illinois (after controlling for numerous other factors) are 34.3% 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 16 presents these findings.

Table 16. Business Earnings Differentials for Selected Groups Relative to White Men

All Industries, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-44.4% ^{***}
Latino	-25.5% ^{***}
Native American	-49.3% ^{***}
Asian/Pacific Islander	-24.2% ^{***}
Other	-12.3% ^{**}
White Women	-53.2% ^{***}

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

** indicates statistical significance at the 0.01 level

Once again, the estimates of the coefficients for these variables were found to be statistically significant at the 0.001 and 0.01 levels. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from -12% to -53%.

d. Conclusion

Using descriptive analysis, Table 13 shows that differentials exist between the business formation rates by Non-Whites and White women and White males across industry sectors. Table 14 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 15 and 16 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 Illinois

a. Business Formation Rates

Table 17 presents business formation rates in the Illinois construction industry for selected demographic groups.

Table 17. Business Formation Rates, Illinois

Construction, 2007-2011

Demographic Group	Business Formation Rates
Black	19.0%
Latino	11.1%
Native American	22.3%
Asian/Pacific Islander	18.2%
Other	1.5%
Non-White	13.2%
White Women	6.9%
Non-White Male	13.7%
White Male	22.6%

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 18 presents the results of the probit analysis for the construction industry in Illinois.

**Table 18. Business Formation Probability
Differentials for Selected Groups Relative
to White Men**

Construction, 2007-2011

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-8.0%
Latino	-7.7%
Native American	-8.5%
Asian/Pacific Islander	-0.8%
Other	-3.0%
White Women	-2.3%

Source: CHA calculations from the American Community Survey

The analysis indicates that Non-Whites and White women in Illinois are less likely to form construction businesses compared to White men even after controlling for key factors. The reduction in probability ranges from 0.8% to 8.5%. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 19 presents the findings from the wage and salary income regression analysis examining the construction industry in Illinois. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

**Table 19. Wage Differentials for Selected Groups
Relative to White Men**

Construction, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-51.0% ^{***}
Latino	-13.3% ^{***}
Native American	-36.0% ^{***}
Asian/Pacific Islander	-51.5% ^{***}
Other	-13.3% ^{***}
White Women	-45.0% ^{**}

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 Illinois earn less than White men in the construction industry. The differential ranges between 13% less and 52% less. Estimates of the coefficients for Black, Latino, Native American, Asian/Pacific Islander, and Other are statistically significant at the 0.001 level. Estimates of the coefficients for White Women are 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 20 presents these findings.

Table 20. Business Earnings Differentials for Selected Groups Relative to White Men

Construction, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-26.3%*
Latino	-6.1%***
Native American	-25.8%***
Asian/Pacific Islander	-10.0%**
Other	0.0%
White Women	-19.4%**

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

** indicates statistical significance at the 0.01 level

* indicates statistical significance at the 0.005 level

With the exception of the estimated coefficient for Other, the estimates of the coefficients for these variables were found to be statistically significant at the 0.001, 0.01, or 0.005 levels. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from 6% less to 26% less. For the estimated coefficient for Other, the results were not found to be significantly statistically different from zero.

d. Conclusion

Using descriptive analysis, Table 17 shows that differentials exist between the business formation rates by Non-White males and White males. Table 18 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 19 and 20 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 Illinois

a. Business Formation Rates

Table 21 presents business formation rates in the construction-related services industry in Illinois for selected demographic groups.

Table 21. Business Formation Rates, Illinois

Construction-Related Services, 2007-2011

Demographic Group	Business Formation Rates
Black	4.6%
Latino	4.2%
Native American	0.0%
Asian/Pacific Islander	3.9%
Other	0.0%
Non-White	4.1%
White Women	8.3%
Non-White Male	6.3%
White Male	10.9%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-White males. (There were zero reported Native American or Other entrepreneurs in the construction-related services industry.) 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 22 presents the results of the probit analysis for the construction industry in Illinois.

**Table 22. Business Formation Probability
Differentials for Selected Groups Relative to
White Men
Construction-related Services, 2007-2011**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-6.2% ^{***}
Latino	-1.3% ^{***}
Native American	---
Asian/Pacific Islander	-5.5% ^{***}
Other	---
White Women	-0.2% ^{***}

Source: CHA calculations from the American Community Survey

The analysis indicates that compared to White men, Non-Whites and White women in Illinois are less likely to form construction-related services businesses even after controlling for key factors. The reduction in probability ranges from 0.2% less to 6.2% less. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 23 presents the findings from the wage and salary income regression analysis examining the construction-related services industry in Illinois. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

**Table 23. Wage Differentials for Selected Groups
Relative to White Men**

Construction-related Services, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-49.2% ^{**}
Latino	-20.2% ^{***}
Native American	-28.1% ^{***}
Asian/Pacific Islander	-19.0% ^{***}
Other	-13.0% [*]
White Women	-33.8% ^{***}

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 Illinois earn less than White men in the construction-related services industry. The differential ranges between 13% less and 49% less. Estimates of the coefficients for, Latino, Native American, Asian/Pacific Islander, and White Women are statistically significant at the 0.001 level. Estimates of the coefficients for Black are statistically significant at the 0.01 level. The estimated coefficient for Other is statistically significant at the 0.05 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 24 presents these findings.

Table 24. Business Earnings Differentials for Selected Groups Relative to White Men

Construction-related Services, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-57.7% ^{***}
Latino	0.0%
Native American	0.0%
Asian/Pacific Islander	-222.6% [*]
Other	0.0%
White Women	-60.8% ^{***}

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

* indicates statistical significance at the 0.005 level

The estimates of the coefficients for Black and White Women were found to be statistically significant at the 0.001 level. The estimated coefficient for Asian/Pacific Islander was statistically significant at the 0.05 level. The differentials in business earnings received by these three demographic groups were less than White males ranging from 57% to 222%. (The proper interpretation of the estimated coefficient for Asian/Pacific Islanders is that White men earn 222.6% greater than similarly situated Asian/Pacific Islanders.) The estimated coefficients for Latino, Native American, and Other were not found to be significantly statistically different from zero.

d. Conclusion

Using descriptive analysis, Table 21 shows that differentials exist between the business formation rates by Non-White males and White males. Table 22 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 23 and 24 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.

4. The Information Technology Industry in Illinois

a. Business Formation Rates

Table 25 presents business formation rates in the information technology industry in Illinois for selected demographic groups.

Table 25. Business Formation Rates, Illinois
Information Technology, 2007-2011

Demographic Group	Business Formation Rates
Black	2.2%
Latino	4.3%
Native American	0.0%
Asian/Pacific Islander	6.2%
Other	5.4%
Non-White	4.4%
White Women	6.7%
Non-White Male	5.3%
White Male	11.4%

Source: CHA calculations from the American Community Survey

White males have a higher rate of business formation than Non-Whites and White women. 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 26 presents the results of the probit analysis for the information technology industry in Illinois.

**Table 26. Business Formation Probability
Differentials for Selected Groups Relative to
White Men**

Information Technology, 2007-2011

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-4.9% ^{***}
Latino	-2.1% ^{***}
Native American	-1.5% ^{***}
Asian/Pacific Islander	-4.7% ^{***}
Other	-0.9% ^{***}
White Women	-2.0% ^{***}

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 Illinois are less likely to form information technology businesses compared to White men even after controlling for key factors. The reduction in probability ranges from 0.9% less to 4.9% less. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 27 presents the findings from the wage and salary income regression analysis examining the information technology industry in Illinois. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

**Table 27. Wage Differentials for Selected Groups
Relative to White Men**

Information Technology, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-15.5% ^{***}
Latino	-8.1% ^{***}
Native American	-158.2% ^{***}
Asian/Pacific Islander	-18.4% ^{***}
Other	-25.5% ^{***}
White Women	-24.6% ^{***}

Source: CHA calculations from the American Community Survey

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, Native American, Asian/Pacific Islanders, Others, and White women in Illinois earn less than White men in the information technology industry. The differential ranges between 8% less and 158% less. (The proper interpretation of the estimated coefficient for Native Americans is that White men earn 158.2% greater than similarly situated Native Americans.) The estimates of all coefficients 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 28 presents these findings.

Table 28. Business Earnings Differentials for Selected Groups Relative to White Men

Information Technology, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-42.0% ^{***}
Latino	-377.9% ^{***}
Native American	-
Asian/Pacific Islander	-17.6% [*]
Other	0.0%
White Women	-67.4% ^{***}

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

* indicates statistical significance at the 0.005 level

The estimated coefficients for Black Latino, and White Women were statistically significant at the 0.001 level. The estimated coefficient for Asian/Pacific Islander was statistically significant at the 0.005 level. The differentials in business earnings received by these three demographic groups were less than White males from between 17.6% to 377.9%. (The proper interpretation of the estimated coefficient for Latinos is that White men earn 377.9% greater than similarly situated Latinos.) For the estimated coefficient for Other, the results were not found to be significantly statistically different from zero. For Native Americans the sample size was too small to calculate an estimated coefficient.

d. Conclusion

Using descriptive analysis, Table 25 shows that differentials exist between the business formation rates and by Non-White males and White males. Table 26 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 27 and 28 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.

5. The Services Industry in Illinois

a. Business Formation Rates

Table 29 presents business formation rates in the services industry in Illinois for selected demographic groups.

Table 29. Business Formation Rates, Illinois
Services, 2007-2011

Demographic Group	Business Formation Rates
Black	4.0%
Latino	5.2%
Native American	16.1%
Asian/Pacific Islander	8.5%
Other	5.3%
Non-White	5.3%
White Women	7.7%
Non-White Male	6.6%
White Male	17.6%

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 30 presents the results of the probit analysis for the services industry in Illinois.

**Table 30. Business Formation Probability
Differentials for Selected Groups Relative
to White Men**

Services, 2007-2011

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-7.2% ^{***}
Latino	-4.7% ^{***}
Native American	-5.7% ^{***}
Asian/Pacific Islander	-5.0% ^{***}
Other	-2.5% ^{***}
White Women	-4.2% ^{***}

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 Illinois are less likely to form services businesses even after controlling for key factors. The reduction in probability ranges from 2.5% less to 7.2% less. Once again, these estimates are statistically significant at the 99.1 level.

b. Differences in Wage and Salary Incomes

Table 31 presents the findings from the wage and salary income regression analysis examining the services industry in Illinois. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

Table 31. Wage Differentials for Selected Groups Relative to White Men

Services, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-44.5% ^{***}
Latino	-25.2% ^{***}
Native American	-71.3% [*]
Asian/Pacific Islander	-28.3% ^{***}
Other	-25.9% ^{***}
White Women	-40.0% ^{***}

Source: CHA calculations from the American Community Survey

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

^{*} indicates statistical significance at the 0.05 level

Holding constant factors such as education, age, occupation, and industry, Blacks, Latinos, White women, Asian/Pacific Islanders and Others in Illinois earn less than White men in the services industry. The differential ranges between 25% less and 71% less. Estimates of the coefficients for Black, Latino, Asian/Pacific Islander, Other, and White Women are statistically significant at the 0.001 level. Estimates of the coefficients for Native American are statistically significant at the 0.05 level.

d. 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 32 presents these findings.

Table 32. Business Earnings Differentials for Selected Groups Relative to White Men

Services, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-53.1% ^{***}
Latino	-37.3% ^{***}
Native American	-77.1% ^{***}
Asian/Pacific Islander	-33.8% ^{***}
Other	-27.0% ^{**}
White Women	-72.6% [*]

Source: CHA calculations from the American Community Survey

*** indicates statistical significance at the 0.001 level

** indicates statistical significance at the 0.01 level

* indicates statistical significance at the 0.005 level

The estimates of the coefficients for these variables were found to be statistically significant at the 0.001, 0.01, or 0.005 levels. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from 27% less to 77% less.

d. Conclusion

Using descriptive analysis, Table 29 shows that differentials exist between the business formation rates by Non-White males and White males. Table 30 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 31 and 32 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 Illinois

a. Business Formation Rates

Table 33 presents business formation rates in the goods industry in Illinois for selected demographic groups.

Table 33. Business Formation Rates, Illinois

Goods, 2007-2011

Demographic Group	Business Formation Rates
Black	2.1%
Latino	4.6%
Native American	4.0% [‡]
Asian/Pacific Islander	11.3%
Other	11.1% [‡]
Non-White	5.0%
White Women	5.5%
Non-White Male	5.2%
White Male	7.9%

Source: CHA calculations from the American Community Survey
[‡] The 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. 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 34 presents the results of the probit analysis for the construction industry in Illinois.

**Table 34. Business Formation Probability
Differentials for Selected Groups Relative
to White Men**

Goods, 2007-2011

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-4.0% ^{***}
Latino	-1.7% ^{***}
Native American	---
Asian/Pacific Islander	2.6% ^{***}
Other	---
White Women	-1.4% ^{***}

Source: CHA calculations from the American Community Survey

The analysis indicates that Blacks, Latinos, and White women in Illinois are less likely to form goods businesses compared to White men even after controlling for key factors. (Once again, this analysis does not include Native Americans and Others.) The reduction in probability ranges from 1.4% less to 4.0% less. However, Asian/Pacific Islanders were more likely to form businesses in this industry relative to White men by 2.6%. These estimates are statistically significant at the 99.1 level.

a. Differences in Wage and Salary Incomes

Table 35 presents the findings from the wage and salary income regression analysis examining the goods industry in Illinois. This indicates the wage differential for selected demographic groups in Illinois relative to White men.

**Table 35. Wage Differentials for Selected Groups
Relative to White Men**

Goods, 2007-2011

Demographic Group	Wages Relative to White Men (% Change)
Black	-41.5% ^{**}
Latino	-11.6% ^{***}
Native American	-32.4% ^{***}
Asian/Pacific Islander	-32.0% ^{***}
Other	-97.8% ^{***}
White Women	-38.7% ^{***}

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 Illinois earn less than White men in the goods industry. The differential ranges between 11% less and 97% less. Estimates of the coefficients for, Latino, Native American, Asian/Pacific Islander, Other, and White Women are statistically significant at the 0.001 level. The estimates of the coefficient for Black are 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 36 presents these findings.

Table 36. Business Earnings Differentials for Selected Groups Relative to White Men

Goods, 2007-2011

Demographic Group	Earnings Relative to White Men (% Change)
Black	-55.4% ^{***}
Latino	-28.8% ^{***}
Native American	0.0%
Asian/Pacific Islander	-26.1% ^{***}
Other	0.0%
White Women	-68.3% ^{***}

Source: CHA calculations from the American Community Survey

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

With the exception of the estimated coefficient for Other and Native American, the estimates of the coefficients for these variables were found to be statistically significant at the 0.001 level. The differentials in business earnings received by Non-Whites and White women compared to White males ranged from 26% less to 68% less. For the estimated coefficient for Other and Native American, the results were not found to be significantly statistically different from zero.

d. Conclusion

Using descriptive analysis, Table 33 shows that differentials exist between the business formation rates by Non-Whites and White women and White males. Table 34 presents the results of a further statistical analysis, which indicated that even after taking into account potential mitigating factors, the differential still exists. Tables 35 and 36 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 THE STATE OF ILLINOIS' MARKET

To explore anecdotal evidence of possible discrimination against minorities and women in the state of Illinois' markets, we conducted 10 group interviews, totaling 123 participants, and two public meetings. We met with business owners from a broad cross section of the industries from which the State 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 Business Enterprise Program ("BEP") program, as discussed in Chapter III.

Many minority and women owners reported that while some progress has been made in integrating their firms into public and private sector contracting activities in Illinois through race- and gender-conscious contracting programs, many 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 the State continues to have a compelling interest in remedying the effects of past and current discrimination, and if so, what types of actions are permitted to ensure equal 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. Discriminatory Attitudes and Negative Perceptions of Competence

Many minority and women owners reported that they continue to encounter discriminatory attitudes, stereotypes and negative perceptions of their qualifications and capabilities by other firms and government officials.

Small minority, women, disadvantaged businesses are perceived to not always have all the qualifications, regardless of how long they've been in business. Sometimes, even just in the way primes deal with you, they assume a certain amount of incompetence, even though they've been working with you for a while. It may not be intentional, but there is still a prevalent feeling I feel in the industry, particularly engineering, that we've got to use them because we got to, if we don't use them, we're not going to get the job.

I think there's a perception that our ability to perform is not the standard that they would expect.

I can kind of feel how people perceive me [as a Black male] or what have you and body language and different things. But for the most part, I've been pretty well received. I try to carry myself in a professional manner and just try to deal with the guys on a business level.

I've actually gone to a major auto manufacturer, was called to give him a price on some work, and they have a room for all the salesmen and [I] sat there and watched them walk in and walk around the room, around the room, and around the room, trying to figure out, where's this contractor at.... [The client] couldn't see me [as a Black man] as being the contractor that they had called.

[Large firms look at minority owned businesses as companies that are being given work, not earning work. That's why we often don't want to be submitting as a minority or BEP.

I'm proud of being an MBE, DBE, BEP certified. But that's not why I've grown my business in 30 years. We've grown it because we were competent and we perform. And when we make mistakes we pay for it. Just like every other firm. But I do feel that [there is a perception [MBEs are less competent and honest]]. It's a hard issue to prove.

People are never going to say it. People are too politically correct for the most part to say it.... You just deal with it.

I didn't want to try and utilize [contracting affirmative action programs] when I could do it. I felt like I should be able to do it on my own merits. But obviously in our society, in our industry, that just does not work.

If the DBE [program] wasn't there, I think that we would not have grown as fast as we have, definitely, if it wasn't for the DBE program. But in some ways, I think it can hold you back as well also.

In my own office, one guy looked at me and says, I didn't realize you were stupid [when he learned he is a person with a disability]. He's no longer working for us.

Some owners had experienced bias from state agency personnel.

[State personnel] look down on us as some kind of beggars for percentages.

When we are 60, 70 people still people ask, what capacity [do you have]? We could do as good as any bigger firm in the city but they will still ask the same question. Even the state departments will ask the same question.

Small businesses [are] so much more flexible and we have the ability to move more quickly and do what's needed than a large business. But I don't think the government, any government entity, sees it that way.

Women, especially those in the construction industry, reported the continuing effects of stereotypes about gender roles and sexist attitudes and behaviors from male colleagues and clients.

Let's just be honest. I'm a woman who's in construction so that just equals bulls eye.... Other contractors who come in behind you and they call you [trade] chicks. Or they tell you, what has the world come to because you're [trade] chicks.... Men come out and they complain that a woman is running the crew.... Even the men that I hire, I'm giving you a paycheck, struggle with taking orders from a woman.... Someone comes to the job and they go to one of the guys [I employ] and they say, are you the lead here?

In negotiations, people think that women aren't savvy businesspeople and that I'll just do this for nothing.

I'm not having men take shots at me because I'm a girl. No. It's that I'm not getting the leadership position. That's why I left [large firm].... There was a glass ceiling.

Some of the older guys are still pigheaded and stupid and say stupid stuff around you. But you're so used to it you just brush it off. Or ... you're at a networking event and the guy says ... come sit with me. And you know that it had nothing to do with [business]..... I don't let too much of it get to me ... but it's still there.... It took me a long time to get where we're at for people to understand that we're a good company and we're female and they'll hire us. But I still think they resent us, that they have to hire us.

When I started my business in 1989, I experienced rampant discrimination [as a woman]. I would walk on the jobsite and they would all get a big snicker and a laugh and then I just had the mindset that I would outlast [them] and do a great job and build a reputation.... The program is really a useful thing for a lot of people. I would not have the opportunity [without it].

I contacted a man in the beginning one time and asked him about doing kind of a joint deal.... And he informed me he would rather not bid a job than have to work with DBE[s].

Three white women described their experiences differently.

If a BEP program is to eliminate discrimination, I don't think there's any discrimination.

I haven't had any problem with discrimination.... I go to my local banker who knows where I live and so I've been able to conquer it that way.

Being a woman I don't think I've had any problems on the jobsites or anything. Nobody's really given me any problems with that. I'm sure I'm different because it started out [as a non-M/WBE] and we have an established firm so we have an established line of credit.

That minority- and women-owned businesses were perceived to lack the capacity to do additional work or more complex work was another barrier to their success.

If [more work] was available, yes [we could do more work], if the opportunity afforded itself.... But, we have to take what we can get sometimes.

There is significant evidence that the larger the goals are the higher the capacity building.... People will take the opportunities. Because we're women or we're minorities doesn't mean that we're not entrepreneurs and we don't seize opportunity, it's just that the opportunity doesn't exist in the current market.

B. Unequal Access to Industry and Information Networks

Exclusion from the industry networks necessary for success was a recurrent theme for many minorities and women. Relationships are key to obtaining work from the agency as well as from prime vendors as subcontractors, subconsultants or suppliers.

First and foremost, construction is a good old boy network where there's a lot of companies that's been well established 40, 50 plus years.... If you go knock on the door to a firm that's been established like that it's going to be hard. Because they're not going to have a comfort level with you and you have to figure out, okay, what angle do we need to go in to try and help break that barrier. That's going to happen even if you're a white brand new start up company but with the minority thing, there's just a little bit more perception that it's out there. That's just the way it is, society is.

If there isn't a requirement, what I have noticed is even with the relationships we've built up, [prime contractors] have longer standing relationships with others and they will take our low number, even if we get the low number, they will take our low number and hand it to the person that they know and say, hey, can you do it for this [price].

If it's a small business [program], I think all the Caucasian males if they wanted to they'd start their own business and it'll still be the good old boy network.

[To break down barriers, we try] to get an open communication line. Letting them know we have goals ... for ourselves and for our family just like you guys do. We like sports just like you do. We have family members that hunt, fish, and do all that, just like you do. And sometimes that helps break the barrier down. Helps them feel, okay, you know what, let's give him a shot. And then you may get a crumb at first. And then that crumb could turn into something better if they feel comfortable with you and you're trustworthy.

All of our aggressive marketing is done by a man. Somebody that's going to play golf, somebody that's going to go to baseball games with them. I have a hard time doing that, inviting the guys to go to the baseball game. That doesn't work for me.... [Male networks have] more money and more power and more connections.... We use the business development guy to look like them, get his foot in the door and then we hope that our product is good enough that we'll get the next job.

I would say the same thing.... There's like the woman network and there's the men network, which is much larger.

You run across the same hurdles in supply as you do contracting. Manufacturers have this good old boy network.... So, if you're a brand new company and you're wanting to get involved in a certain type of product, well they already have local distributors. So you've got to figure out a way to convince them to add another distributor..... Sometimes, you try and sell them that you can help increase sales in this area. And sometimes there's been situations where one of the contractors that we've worked with has nudged the manufacturer, hey, we're doing business with this guy ... go check his facility out and see if it's a workable situation.... The contractors or the people that have the power, whether you're trying to get involved in contracting or whether you're trying to get involved in supply, they have a lot of say-so in that. You have to be let in to the network of construction, whether it's supply or contracting.

Longstanding relationships between majority-owned firms and white males were cited as barriers to access.

It's much more the good old boys club in the smaller towns and rural areas [of the state].

If they've grown up together, they're going to kind of look out for each other

Most of my contractors in this area have had the same sub working for them for many years. I had trouble getting my foot in the door.... I thrive on out-of-state contractors. Because they probably don't know who they want to work for and they'll be most open-minded about taking my bid.

A white male reported that he observed the access barriers faced by women.

I probably definitely have an advantage [as a man in less diverse environments].... We are a firm of 16 people. We went up against five of the largest firms in the world based out of St. Louis and Chicago. You know how I got the job? Because I knew the chairman of the board [of the agency] was a John Deere dealer and I knew every John Deere tractor they made and before I was sitting here talking to him about how his sales were off on the 750 combine. And I could actually tell him how it worked. That's why we got hired. Not because we were better at doing [type of project].... And I'm still working on [working with women].... But it is hard. It is hard to touch people that you don't have some cultural relationship to.

C. Obtaining Public Sector Work on an Equal Basis

There was almost universal agreement among minority and women owners that the BEP Program remains critical to reduce barriers to equal contracting opportunities and to open doors for state work.

[Without goals,] I would not be working in the architecture market. I would not be providing engineering services because most people don't come to us unless it is a requirement.... All I ask is an opportunity.

[The program] does matter.

[Prime vendors don't use me] when there are not any goals.

90 percent of our work has some kind of a goal involved with it. I have been able to, as she had stated, develop relationships and improve our mettle and our abilities out there and how we can partner with the prime contractors.

They only want us to do what our level of participation is in the project. No matter what it is we're not going over. Even if they have to carve out a piece of our work and give it to [a non-certified firm].

We have the same issue all the time.

[Being denied FBE certification] ruined my business.

Our business would be 50 percent cut in half [without goals].

There's no goals, we're not going to get work.

The construction industry wasn't open to women and minorities. We don't have this longstanding opportunity to [build capacity]. Except if you're born into a construction family. There's just not that opportunity. We're supposed to be creating opportunities that were never there.

You have to have an incentive. It's like [the] Metropolitan St. Louis Sewer District, just dropped for the design side their DBE requirements [based on a disparity study] because they said the DBEs are working. Well, they're only working because you're requiring it. If you don't require it or you don't give an incentive people aren't going to do it.

The companies I work for, some of them would never use me again if there was not the program. Some of them do use me regardless.

I think the BEP program is a good program.

If it was just [a] small business [program], no, they would not come to me [as a minority female].

A woman who is also disabled faced extreme barriers.

Because I'm in a wheelchair there's a lot of pre-bid meetings that I can't attend or networking events that I can't attend because they're not wheelchair accessible.... My bonding company refused to give me a bonding number and told me that they would only go job by job. And even though I have excellent credit they'll only let me have a very small line of credit. I have suspected that suppliers have given me higher pricing and I have been told that they're very selective about who they select as an applicator.... One took so long— five months— that I had to finally call headquarters to ask why they weren't getting back to me about being an applicator and it was approved in less than week.... Or they assume I'm with the [agency] or I'm not actually a contractor. Or ask me, what are you doing here? A lot of times there's places I just can't get into.... Parking is a problem. I can't go on walkthroughs.... It just seems like nobody really approaches me. I have to go out of my way to approach people, that they don't feel comfortable. There's some kind of social barrier where people feel uncomfortable to talk to me because I'm in a wheelchair. Or they don't take me seriously.

Many participants stated that it is very difficult to obtain work as prime vendors with the State.

We don't consider ourselves a minority business enterprise. We are a prime business enterprise that happens to be minority owned. And so we always go in as the prime when we can. And then generally sometimes we're reduced to trying to be a sub if we want any chance to get this business on the public sector side.

We're a prime. We're just as good as any other vendor. We have certifications and MBAs and everything else. But because we're minority owned, you get pigeonholed into that's all you are and that's the best you can be. So, that's a real problem.

We were getting the [prime consultant] work; now [that we are certified as a PBE] we're not.

One prime consultant agreed with M/FBEs that they are too often shut out of prime contract opportunities.

Most of the firms that I've contacted, you know, seem very qualified.... A lot of them have pretty good resumes, they've done a lot of work [but they don't get prime opportunities].

To create more prime contract opportunities, there was broad support among M/FBEs and some non-M/FBEs for the concept of a small business target market, and continuing and expanding the State's Small Business Setaside Program.

You [need to] have a set aside program for the professional engineers, architects.... You had to have projects that the minorities can bid on and not to be at the mercy of these big architects.... Nobody's going to come to you if you are an architect. Because the architect is going to look after his own interest before he is going to come to you.

The set aside program is a good idea because you're almost wasting your time competing against people that are going to go show big things.

The small business set aside programs [are] an ideal concept for small businesses. The federal government does it and it works for them.

[The state] could [expand the use of this method] and they need to.

D. Obtaining Private Sector Work or "No Goals" Work on an Equal Basis

Most M/WBEs were not successful in obtaining private sector or "no goals" contracts.

I was actually on the winning team on the design side. Never got work from it because there were no specific goals.

In the private sector, they don't look at you this same way as they do in the public sector where they have quotas to meet.... There's G]eneral C[ontractor]s that took me 10, 12 years, 15 years to break the barrier to get to their private [specialty subcontractor] work.

I would have to agree with everyone else as well in terms of trying to get the private work. We have not done a ton of it and I know the GCs that we work for are doing it.

We can't negotiate a job. Negotiated jobs are not for us. They're for their friends.

With private clients, especially the smaller ones that don't have goals ... I almost think that being ... a woman owned business almost works against you.

One owner recounted that large private firms do not always continue their efforts at inclusion beyond a marquee project in a minority community.

There was a major food chain company, I won't mention their name, but decided that they were going to do an all MBE, WBE store.... We got up to like 85 percent or something, MBE, WBE participation. The store project was done. I mean it was one of the best projects I ever did. And the chairman of the food company came out for the grand opening, gave us high praise, but not one of those contractors went on to do work with that food chain.

Some businesses had been able to leverage participation in programs into non-goals projects.

I've been doing this since the 80s and a lot of the firms that I met initially because there was a WBE requirement, I continue to work with and for even when there is not a requirement. So, this gave me access.

[I have some non-goals work] because I've outlasted [other contractors], and I have some specialties that I've been able to make myself more valuable.

A handful of White females outside construction reported that they were able in win private sector work.

With private work, it's relationships and quality and competency. So, if you can go in and you can show that you're quality and you have good references and you have a background in the industry, private business, pretty much they'll do the deal. You don't have to bid and list and all this stuff.

Sometimes [private clients are] happy that we're a WBE because they can check it off, some box somewhere. But usually, that doesn't matter to them.

On the private side, I don't know that it makes any difference at all. Although there are places like [very large national firm] that do have their own internal goals that they want to meet, so I guess it does help on some of the larger clients like that.

I'd rather just go after private [work]. I don't even go after government business anymore.

E. 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 State and private sector contracts and subcontracts. While not definitive proof that the Illinois needs to continue to implement the BEP program to remedy for 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 the State would be a passive participant in a discriminatory market area without affirmative interventions and whether race- and gender-conscious remedies are necessary to address that discrimination.

VII. RECOMMENDATIONS FOR THE STATE OF ILLINOIS' BUSINESS ENTERPRISE PROGRAM

The quantitative and qualitative data presented in this Study provide a thorough examination of the evidence regarding the experiences of minority- and women-owned firms operating in the state of Illinois' geographic market area and its procurement markets. As required by strict scrutiny, we analyzed evidence of such firms' utilization by the state as measured by dollars spent, as well as M/FBEs' experiences in obtaining state contracts and associated subcontracts and opportunities in the private sector. We gathered statistical and anecdotal data to provide the evidence necessary to determine whether there is a strong basis in evidence that barriers to full and equal contracting opportunities exist on the basis of race or gender in the state's market area, and if so, what narrowly tailored remedies are appropriate. The Study results fully support the state's continuing compelling interest in implementing its race- and gender-conscious BEP program. The statistical data and the anecdotal testimony provide a sufficient basis for remedial race- and gender-based measures to ensure full and fair access by all firms to state prime contracting and associated subcontracting opportunities.

The following recommendations conform to strict scrutiny and national best practices for M/WBE programs. We suggest enhancements to the state's existing measures and new initiatives to increase opportunities for BEP firms and other small businesses.

A. Enhance Race and Gender-Neutral Measures

1. Implement an Electronic Contracting Data Collection and Monitoring System for the BEP Program

A critical element of this Study and a major challenge was data collection of full and complete prime contract and associated subcontractor records from the 34 state agencies included in the Study. There is no central repository of contract information for all agencies covered by the BEP program. The state does not have the ability to track statewide spend by vendor by contract number or to link it to a master contract. The agencies collect contract data in a wide variety of formats: Excel spreadsheets; Word documents; scanned documents; and hard copy; or some mix of formats. Data are categorized in different ways: by state fiscal year; by contract; by industry category; and sometimes by all three or with multiple scanned files for each contract. Many files were missing significant vendor information, including telephone numbers; complete physical addresses; and email addresses. Contracts were usually not categorized by industry (*e.g.*, construction information technology, etc.). Some agencies had no contract number or other unique identification code in the data, while others had duplicate contract numbers.

Beyond significantly hampering and lengthening the study process, the lack of uniformity and an electronic system make it much harder to administer the

program and ensure it meets best practices. The ability to track goal attainment, monitor compliance, track payments, stay in contact with firms, conduct outreach and create reports for the Governor, the Legislature and the public is fundamental to answering the question whether the BEP program is achieving its objectives. Improved data gathering should therefore be a major focus.

We therefore recommend the state procure and implement an electronic data collection system that all agencies must implement with at least the following functionality:

- Full contact information for all firms, including email addresses, NAICS/NIGP codes, race and gender ownership, small business certification status and prequalification status (for CDB projects).
- 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 BEP certification status and NAICS/NIGP 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 the agency, 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, including utilization by industries, race, gender, dollar amount, procurement method, agencies, 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 state staff, prime contractors and subcontractors to perform all necessary activities.

2. Lengthen Solicitation Times

Lengthen the time that solicitations are out to permit vendors to develop more complete utilization plans. Many business owners stated that the typically short timeframes of many agencies hampers their ability to identify and utilize certified firms. This was especially important for larger or more complex projects. Longer times will also facilitate the ability of M/FBEs to submit as prime vendors.

3. Increase Access to State Contracting and Vendor Information

The electronic management system described above will help to address the concerns raised in the interviews that it is difficult to obtain information about which prime vendors might be interested in a project so that M/FBEs can market themselves and to learn the outcomes of particular solicitations. A specific recommendation was to require prime bidders 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/F/PBEs could know whom to contact about possible subcontracting or partnering arrangements. Posting of interest by individual firms, complete solicitation information, and tracking contract outcomes will reduce the burdensome firms and state staff as well as promote transparency. Standardization and clear protocols would help all firms to compete and facilitate relationships between certified firms and possible partners.

Further, a system will assist agencies to identify BEP firms prior to the issuance of solicitations for appropriate outreach. Small businesses without marketing staffs will benefit from notification of possible projects, and BEP staff will be freed from responding to agency requests for lists of certified firms.

4. Increase Agency Outreach to M/F/PBEs

Numerous participants in the interviews requested additional outreach efforts to open up opportunities at specific agencies and universities. While CMS and CDB host many informational and training events, other agencies were described as much more opaque and difficult to penetrate. More focus on outreach and events hosted directly by the specific agency or university are needed. Suggestions included networking events with agency personnel responsible for contracting decisions as well as prime vendors to increase familiarity and comfort levels between the parties.

As is the case with many governments, the study revealed that M/FBEs 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 focusing on those industries, and identification of firms that are not currently certified with BEP but might be eligible for inclusion to encourage applications.

5. Provide Agency Contracting Forecasts

The ability to plan ahead is critical for small firms, which often lack the resources to respond quickly to new opportunities. Annual or semi-annual contracting forecasts, whereby the agency projects approximately what it will spend at the general industry level or on specific projects, was cited by business owners as one step the state should take to reduce barriers. This is a common practice; for example, the City of Chicago and the Chicago Transit Authority provide information about what each government expects to spend in the upcoming year.¹⁶²

6. Review Experience Requirements

Many interview participants expressed concern that specifications require levels of experience unlikely to be met by small firms or unfairly advantage large firms or incumbents. For example, CDB does not count work done on residential projects—even if the skills are similar—towards prequalification for its contracts. Agencies should review these requirements to ensure that M/F/PBEs and small firms are not unfairly disadvantaged and that there is adequate competition for projects.

7. Expand Small Contractor Bonding and Financing Programs

Access to bonding and working capital are the two of the largest barriers to the development and success of M/F/PBEs and small firms. The state has recognized this fact, and has developed several state-sponsored bonding and financing assistance programs for such firms. We applaud those efforts, but more should be done. More resources that will permit larger loans and bonds to increase capacity are needed, and special efforts should be made to include firms in a variety of industries and ensure that all groups have access to these resources.

8. Coordinate the BEP Program with the Small Business Setaside Program

Currently, the Small Business Setaside program is administered by the Chief Procurement Officers. This highly unusual setup requires coordination and congruence between this race- and gender-neutral procurement method (an element of a narrowly tailored M/WBE program) and CMS. Further, there was little awareness of the program among BEP certified firms. We recommend that the two programs use the same industry codes (NAICS or NIGP codes); adopt the same size standards; and consider annual gross receipts on the same basis (preferably, a rolling three year average like the USDOT DBE program). This will reduce the burdens on firms seeking to participate in both programs and the confusion apparent in the business owner interviews about which standards apply to individual contracts and individual firms. It will also mean that firms certified by BEP, so long as they have an Illinois presence, will not need to

¹⁶² <http://www.cityofchicago.org/content/dam/city/depts/dps/Outreach/1Q2015BuyingPlan.pdf>;
http://www.transitchicago.com/assets/1/procurement/2015_CTA_Buying_Plan.pdf.

submit applications separately to the CPOs, again reducing the burdens on business and state staff.

9. Create a Cabinet Level Position with Overall Responsibility for Inclusion

To be fully effective, the commitment of the government of Illinois must be clear and enforced. The BEP program should continue to be administered and overseen by CMS, but a cabinet level position that reports directly to the governor will help to coordinate efforts across the state agencies and universities and develop statewide policies to implement best practices.

The state of Maryland has used this approach successfully in implementing one of the best M/WBE programs in the nation that has consistently achieved solid utilization and created capacities in minority- and women-owned firms. The Governor's Office of Minority Affairs ("GOMA") is a cabinet-level state office that advocates for M/WBEs. GOMA is also responsible for overseeing the work of the state agencies as they plan and carry out projects that are intended to overcome special problems related to M/WBE participation initiatives. It assists owners who are seeking state certification and state procurement opportunities, as well as those who believe they have been treated unfairly by a state agency or other entity. It also provides referrals to agencies and other entities that have programs to assist minority business owners. This approach can serve as a model to move Illinois' efforts forward for M/WBEs.

B. Continue to Implement the BEP Program

The Study's results support the determination that the state has a strong basis in evidence to continue to implement the BEP Program. The record— both quantitative and qualitative— establishes that M/FBEs in the state's market area continue to experience significant disparities in their access to state contracts and private sector contracts and to those factors necessary for business success. These findings support the inference that discrimination remains a barrier to full and fair opportunities for all firms. Even with the use of contract goals, M/FBEs suffered significant disparities on state-funded jobs. Without the use of contract goals to level the playing field, the state might function as a "passive participant" in the "market failure" of discrimination. We therefore recommend the continued implementation of the program and the inclusion of all groups for credit towards meeting contract goals.

1. Use the Study to Set the Overall, Annual BEP Goal

As discussed in Chapter II of the Study, the state's constitutional responsibility is to ensure that goals reflect reasonable estimates of the availability of minority and female-owned firms. The availability estimates in Chapter IV should be the basis for consideration of overall, annual spending targets for state funds. We found the overall, weighted availability of M/FBEs in all sectors combined to be 12.8 percent. There are no quantitative data on the availability of PBEs, but we note that because disability is not a protected classification for Equal Protection

Amendment analysis, precise estimates are not necessary; continuing the current goal of 2 percent is reasonable.

We strongly urge that the current process whereby agencies seek “exemptions” from the statewide goal be discontinued. While not suffering from the constitutional infirmity of applying blanket goals because this approach restricts, not overextends, the reach of the program, it does violate the principle that individual procurements should be considered on their own merits for the use of goals. For example, in FY 2013, almost \$82 million was exempted by broad category for contracts for professional and artistic services; services not elsewhere classified; printing; office supplies, legal fees; and auditing and management consulting services. Such blanket exemptions, without consideration of actual scopes of work, may be reducing opportunities for certified firms, especially since those are areas where M/F/PBEs are available and other governments have been able to achieve participation. The study’s availability estimates reflect marketplace factors, and there is no reason to disregard these results based on agency guesses about the availability of M/FBEs. Goals should be set on a case-by-case basis. We also note that such an approach is highly unusual for M/WBE programs.

2. Use the Study to Set Contract Specific Goals

Goals applied to contracts must also be are narrowly tailored to the specifics of the project. The detailed availability estimates in the Study can serve as the starting point for contract goal setting. This methodology involves four steps.

1. Weigh the estimated dollar value of the scopes of the contract by industry codes as determined during the process of creating the solicitation. To increase understanding and compliance, these industry codes could be listed in the solicitation as a guide to how the goal was determined and where the agency expects bidders to seek BEP participation. Good faith efforts could be defined as, among several other elements, an adequate solicitation of firms certified in these codes.
2. Determine the availability of BEP firms 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.

CMS introduced an interim contract specific goal setting process in 2013, using data from Hoovers. This data set should now be replaced by the Study’s results.

It is possible that low utilization was driven in part by the prior practice in some agencies of evaluating only the subcontractable scopes of work of a contract for goal setting. The interim goal setting process includes all dollars. The BEP Act covers all dollars, not just subcontracting dollars, and there is ample evidence

that barriers to prime contracting opportunities are least as high as those for subcontracting scopes.

Another possible driver of lower participation is that goals are set only on contracts of \$250,000 or greater. While it is administratively easier to set a blanket floor, this is a high floor, especially because it is on smaller contracts that M/FBEs are more likely to participate. Perhaps this level can be lowered to \$100,000 or to all formally procured contracts.

The state might consider adopting a flexible approach on particular contracts regarding whether to set a MBE goal, an FBE goal and a PBE goal. This determination would be guided by the scopes of work, the location of the project and the certified firms available to work on the contract. This may provide additional opportunities for greater diversification of certified firms, thus promoting opportunities for firms of all races and ethnicities.

We urge the state to bid some contracts that it determines have significant opportunities for DBE participation without goals. Similar to the evidence developed as part of the record in the *Northern Contracting* litigation, these “control contracts” can illuminate whether certified firms are used or even solicited in the absence of goals. The development of some unremediated markets data, as held by the courts, will be probative of whether the BEP program remains needed to level the playing field for minorities and women.

At present, there is only a Memorandum of Understanding between CMS and other agencies about how to set contract specific goals. CMS should be the final authority on goal setting and program administration.

3. Narrowly Tailor Program Eligibility Standards

The case law has evolved significantly since the program was adopted over 20 years ago. 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. The state should therefore consider more narrowly tailoring the criteria for eligibility to participate in the program to meet these strict scrutiny tests.

The current size standard is \$75 million in annual gross receipts, which vastly exceeds any standard recognized by the federal government, and possibly any government. There is no personal net worth limit. The case law is clear that contracting affirmative action program must be limited to firms that are small and that are owned, managed and controlled by economically (and socially) disadvantaged persons. 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, including those in Illinois, 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

¹⁶³ 13 C.F.R. Part 121.

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, the state could undertake research to set its own limits, although we note the paucity of data upon which such an analysis might be done. To smooth out the fluctuations in firms' revenues and individuals' incomes, and reduce the burdens on CMS staff and vendors, we suggest extending the certification period from one year to three years and using a rolling three gross receipts average.

The program currently permits firms located anywhere to participate in the program. However, the case law is consistent that a state may remedy discrimination only in those markets in which it operates. We therefore suggest that the program's presumptive eligibility be restricted to Illinois-based businesses. However, out of state firms, such those located in bordering state or operating in national markets, should be eligible if they can demonstrate efforts to do business with the state or with prime vendors to the state.

4. Increase Monitoring, Accountability and Transparency

It was apparent from the interviews with business owners and state personnel that much more monitoring is necessary. Purchasing agency contract administration staff and project field managers must be the first line check on vendors' compliance with their approved Utilization Plans. Monthly reporting should be required, using the electronic system. Agencies' should be required to post results and progress towards meeting their agency compliance plans. What gets measured, gets valued. This will also greatly assist the BEP Council to perform its responsibilities to enforce, monitor and recommend program improvements.

5. Consider Adopting a Mentor-Protégé Program

The state should consider implementing a Mentor-Protégé Program, similar to that adopted by the Illinois Department of Transportation ("IDOT"). This approach was welcomed by M/FBEs and several large prime contractors as a way to increase M/FBEs' capacities, and several owners reported good experiences with IDOT's program. Perhaps this approach can be piloted by CDB.

Elements should include:

- Formal program guidelines.
- An agency-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

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.

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 the state 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.

The Mentor-Protégé Guidelines in Appendix D to 49 C.F.R. Part 2, which govern IDOT's program, are an excellent the starting point. The General Counsel's Office at USDOT has provided some additional guidance¹⁶⁶, and USDOT's Office of Small Disadvantaged Business Utilization had adopted a pilot program¹⁶⁷ and created sample documents¹⁶⁸. Careful screening of participants and close, real time oversight of the progress towards goals and objectives is key to meaningful results and the prevention of fraud.

C. Conduct Regular BEP Program Reviews

To meet the requirements of strict constitutional scrutiny and ensure best practices in program administration continue to be applied, the state should conduct a full and thorough review of the evidentiary basis for the program approximately every five to seven years.

A new sunset date for the program, when it will end unless reauthorized, should be adopted to meet the narrow tailoring test that race-and gender-conscious measures be used only when necessary. The failure to have such a provision has been one ground upon which courts have struck down programs. A new disparity study or other applicable research should be commissioned in time to meet the sunset date.

D. Develop Performance Measures for Program Success

The state should develop quantitative performance measures for overall success of the program to evaluate its effectiveness in reducing the systemic barriers

¹⁶⁶ <http://www.dot.gov/osdbu/disadvantaged-business-enterprise/official-questions-and-answers>.

¹⁶⁷ <http://www.dot.gov/osdbu/procurement-assistance/mentor-protege-pilot-program>.

¹⁶⁸ <http://cms.dot.gov/small-business/procurement-assistance/mentor-protege> program.

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

- Progress towards meeting the overall, annual BEP goal.
- The number of bids or proposals, and the dollar amount of the awards and the goal shortfall, where the bidder was unable to meet the goals and submitted good faith efforts to do so.
- The number 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/F/PBE substitutions during contract performance.
- Increased bidding by certified firms as prime vendors.
- Increased prime contract awards to certified firms.
- Increased “capacity” of certified firms, as measured by bonding limits, size of jobs, profitability, complexity of work, etc..
- Increased variety in the industries in which M/F/PBEs are awarded prime contracts and subcontracts.
- “Graduation” data, such as the rates at which firms exceed the personal net worth and the size limits, the industries in which they operate, the movement from subcontracting to prime contracting, and the experiences of firms that exit the program.

Appendix A: Master M/W/DBE Directory

To supplement race and sex information in Dun & Bradstreet/Hoovers used to estimate M/W/DBE availability in the 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 the State. 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.

In addition to the State's lists, we obtained lists from the following entities:

- Business Research Services
- Chicago Chinatown Chamber of Commerce
- Chicago Minority Suppliers Development Council
- Chicago Rockford International Airport
- Chicago United
- Chicago Urban League
- City of Chicago
- City of Rockford
- Cook County
- Diversity Information Resources
- DuPage County
- Illinois Department of Central Management Services
- Illinois State Black Chamber of Commerce
- Illinois UCP
- National Organization of Minority Architects
- Small Business Administration/Central Contractor Registry
- Suburban Minority Contractors Association
- Black Contractors United
- Federation of Women Contractors
- Hispanic American Construction Industry
- Women Construction Owners & Executives
- North Carolina Indian Economic Development Initiative, Inc.

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

Abraham Lincoln Capital Airport
Central Illinois Regional Airport
Chicago Midway International Airport
Chicago O'Hare International Airport
Chicago Public Schools
Chicago Transit Authority
Greater Peoria Regional Airport
Illinois Department of Transportation
Illinois Tollway
METRA (Chicago Railway)
Metropolitan Pier and Exposition Authority
University of Illinois
University of Illinois Willard Airport

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

American Indian Development Association
Champaign County
Chicago Black Pages
Village of Arlington Heights
City of Cicero
City of Elgin
City of Evanston
City of Joliet
City of Naperville
Village of Schaumburg
City of Waukegan
Decatur Airport
Hispanic Lawyers Association of Illinois
Illinois Hispanic Chamber of Commerce
Joliet Region Chamber of Commerce
Kane County
Kankakee County
Kendall County
Lake County
Marshall County
McHenry County
McLean County
Menard County

National Center of American Indian Enterprise Development
Rock Island County
Society of Taiwanese Americans
Tazewell County
The John Marshall Law School
Vermillion County
Williamson County Regional Airport
Rogers Park Business Alliance
Association of Asian Construction Enterprises
Taiwanese American Professionals Chicago

We were unable to obtain lists from the following entities:

Alliance of Business Leaders & Entrepreneurs
Arab American Bar Association of Illinois
Arquitectos - The Society of Hispanic Professional Architects
Asian American Alliance
Asian American Bar Association of the Greater Chicago Area
Asian American Institute
Asian American Small Business Association
Black Chamber of Commerce of Lake County
Chatham Business Association, Small Business Development
Chicago State University
Chicago Women in Architecture
Aurora Regional Chamber of Commerce
City of Aurora
City of Springfield
Coalition of African American Leaders
Cosmopolitan Chamber of Commerce
Enterpriz Cook County
Hispanic SMB
Illinois Department of Commerce and Economic Opportunity
Indian American Bar Association
MidAmerica St. Louis Airport
National Association of Women Business Owners
National Society of Hispanic MBAs - Chicago Chapter
Puerto Rican Bar Association of Illinois
Puerto Rican Chamber of Commerce
Quad City International Airport
Rainbow Push Coalition International Trade Bureau
Rockford Black Pages
St. Clair County
Tribal Procurement Institute PTAC

Will County
Women's Bar Association
Business Partners - The Chamber for Uptown
Philippine American Chamber of Commerce of Greater Chicago
Korea Business Association
Korean American Association of Chicago
Chicago Korean American Chamber of Commerce
Taiwanese American Chamber of Commerce of Greater Chicago
Taiwanese Chambers of Commerce of North America
Vietnamese American National Chamber of Commerce
West Ridge Chamber of Commerce
Arab American Association for Engineers & Architects
Chicago Minority Business Association
Association of Subcontractors & Affiliates

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

Aurora Hispanic Chamber of Commerce
Austin Chamber of Commerce
Black Women Lawyers of Greater Chicago, Inc.
Latin American Chamber of Commerce
Women's Business Development Center
African American Contractors Association

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 Illinois than it is in Alabama). We therefore developed new variables that would show the interaction between race and gender and one particular state. Since this Report examined Illinois, that was the state employed. The coefficient for the new variable showed the impact of being a member of that race or gender in Illinois. 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.¹⁶⁹ 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

¹⁶⁹ The exact interpretation depends upon the functional form of the model.

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.

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 the State of Illinois as it explores the necessity of intervening in the marketplace 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 A, one way to uncover the relationship between the dependent variable (e.g., wages) and the independent variable (e.g., non-whites) is through multiple regression analysis. An example helps to explain this concept.

Let's 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 is 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.¹⁷⁰ The confidence interval will vary depending upon the level

¹⁷⁰ 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.

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.

Appendix E: Additional Data from the Analysis of the Survey of Business Owners¹⁷¹

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

¹⁷¹ See Footnote 15 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 the American Community Survey

**Table F1. Partial Results from Log-linear
Regression Analysis**

All Industries, 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.296***
Latino	-.186***
Native American	-.326***
Asian/Pacific Islander	-.277***
Other	-.234***
White Women	-.324***
IL_Black	-.0473***
IL_Latino	.0648***
IL_Native American	-0.072
IL_Asian/Pacific Islander	-.0275**
IL_Other	-0.048
IL_White Women	-.0145**
Adjusted R-Squared	0.486
legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American
Community Survey

Table F2. Partial Results from Log-linear Regression Analysis

All Industries, 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.444***
Latino	-.255***
Native American	-.493***
Asian/Pacific Islander	-.242***
Other	-.123**
White Women	-.532***
IL_Black	0.034
IL_Latino	0.026
IL_Native American	-0.248
IL_Asian/Pacific Islander	0.034
IL_Other	0.118
IL_White Women	-0.035
Adjusted R-Squared	0.197
legend: * p<0.05; ** p<0.01; ***p<0.001 Source: CHA calculations from the American Community Survey	

**Table F3. Partial Results from Probit
Regression Analysis**

All Industries, 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.383
Latino	-0.256
Native American	-0.235
Asian/Pacific Islander	-0.109
Other	-0.067
White Women	-0.202
IL_Black	0.037
IL_Latino	-0.066
IL_Native American	0.168
IL_Asian/Pacific Islander	0.059
IL_Other	-0.122
IL_White Women	0.015
Pseudo R-Square	0.242

Source: CHA calculations from the American
Community Survey

Table F4. Partial Results from Log-linear Regression Analysis

Construction, 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.387***
Latino	-.133***
Native American	-.36***
Asian/Pacific Islander	-.25***
Other	-.133***
White Women	-.38***
IL_Black	-.123***
IL_Latino	0.0214
IL_Native American	0.18
IL_Asian/Pacific Islander	-.265***
IL_Other	0.127
IL_White Women	-.0696**
Adjusted R-Squared	0.302

legend: * p<0.05; ** p<0.01; ***p<0.001
 Source: CHA calculations from the American Community Survey

Table F5. Partial Results from Log-linear Regression Analysis

Construction, 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.492***
Latino	-.0612***
Native American	-.258***
Asian/Pacific Islander	-.1**
Other	0.0441
White Women	-.515***
IL_Black	.229*
IL_Latino	0.138
IL_Native American	0.0293
IL_Asian/Pacific Islander	-0.00983
IL_Other	0.976
IL_White Women	.321**
Adjusted R-Squared	0.158

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

**Table F6. Partial Results from Probit
Regression Analysis**

Construction, 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.299
Latino	-0.287
Native American	-0.316
Asian/Pacific Islander	-0.032
Other	-0.113
White Women	-0.085
IL_Black	0.172
IL_Latino	-0.122
IL_Native American	0.213
IL_Asian/Pacific Islander	0.000
IL_Other	-1.128
IL_White Women	0.010
Pseudo R-Square	0.11

Source: CHA calculations from the American Community Survey

Table F7. Partial Results from Log-linear Regression Analysis

Services, 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.367***
Latino	-.252***
Native American	-.412***
Asian/Pacific Islander	-.283***
Other	-.259***
White Women	-.342***
IL_Black	-.0777***
IL_Latino	0.00162
IL_Native American	-.301*
IL_Asian/Pacific Islander	-0.03
IL_Other	-0.2
IL_White Women	-.0578***
Adjusted R-Squared	0.395

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

Table F8. Partial Results from Log-linear Regression Analysis

Services, 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.531***
Latino	-.373***
Native American	-.771***
Asian/Pacific Islander	-.338***
Other	-.27**
White Women	-.616***
IL_Black	-0.101
IL_Latino	-0.0557
IL_Native American	-0.218
IL_Asian/Pacific Islander	0.0659
IL_Other	-1.62
IL_White Women	-.11*
Adjusted R-Squared	.179
legend: * p<0.05; ** p<0.01; ***p<0.001 Source: CHA calculations from the American Community Survey	

**Table F9. Partial Results from Probit
Regression Analysis**

Services, 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.477
Latino	-0.310
Native American	-0.377
Asian/Pacific Islander	-0.334
Other	-0.167
White Women	-0.283
IL_Black	-0.018
IL_Latino	-0.022
IL_Native American	0.442
IL_Asian/Pacific Islander	0.092
IL_Other	-0.391
IL_White Women	0.010
Pseudo R-Square	0.193

Source: CHA calculations from the American Community Survey

Table F10. Partial Results from Log-linear Regression Analysis

Goods, 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.317***
Latino	-.235***
Native American	-.324***
Asian/Pacific Islander	-.32***
Other	-.24***
White Women	-.387***
IL_Black	-.0977**
IL_Latino	.119***
IL_Native American	0.0578
IL_Asian/Pacific Islander	-0.00309
IL_Other	-.738***
IL_White Women	0.00589
Adjusted R-Squared	0.391
legend: * p<0.05; ** p<0.01; ***p<0.001 Source: CHA calculations from the American Community Survey	

Table F11. Partial Results from Log-linear Regression Analysis

Goods, 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.554***
Latino	-.288***
Native American	-0.213
Asian/Pacific Islander	-.261***
Other	0.326
White Women	-.683***
IL_Black	-0.0222
IL_Latino	0.341
IL_Native American	(omitted)
IL_Asian/Pacific Islander	-0.00143
IL_Other	-1.05
IL_White Women	-0.185
Adjusted R-Squared	0.094

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

Table F12. Partial Results from Probit Regression Analysis

Goods, 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.300
Latino	-0.127
Native American	-0.031
Asian/Pacific Islander	0.196
Other	-0.001
White Women	-0.105
IL_Black	-0.163
IL_Latino	0.182
IL_Native American	-0.217
IL_Asian/Pacific Islander	0.083
IL_Other	0.368
IL_White Women	-0.015
Pseudo R-Square	0.120

Source: CHA calculations from the American Community Survey

Table F13. Partial Results from Log-linear Regression Analysis

Information Technology, 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.267***
Latino	-.197***
Native American	-.292***
Asian/Pacific Islander	-.184***
Other	-.255***
White Women	-.246***
IL_Black	.112***
IL_Latino	.116**
IL_Native American	-1.29***
IL_Asian/Pacific Islander	0.0357
IL_Other	0.208
IL_White Women	-0.0277
Adjusted R-Squared	0.386

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

Table F14. Partial Results from Log-linear Regression Analysis

Information Technology, 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.42***
Latino	-.339***
Native American	-0.572
Asian/Pacific Islander	-.176*
Other	0.0975
White Women	-.674***
IL_Black	-0.106
IL_Latino	-3.44***
IL_Native American	(omitted)
IL_Asian/Pacific Islander	-0.366
IL_Other	-0.123
IL_White Women	0.147
Adjusted R-Squared	.112

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

**Table F15. Partial Results from Probit
Regression Analysis**

Information Technology, 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.371
Latino	-0.162
Native American	-0.111
Asian/Pacific Islander	-0.353
Other	-0.070
White Women	-0.148
IL_Black	-0.318
IL_Latino	-0.166
IL_Native American	(omitted)
IL_Asian/Pacific Islander	-0.005
IL_Other	-0.195
IL_White Women	-0.034
Pseudo R-Square	0.087

Table F16. Partial Results from Log-linear Regression Analysis

Construction-related Services , 2007-2011

Dependent Variable: Logarithm of Wages	
Independent Variable	Coefficient
Black	-.248***
Latino	-.202***
Native American	-.281***
Asian/Pacific Islander	-.19***
Other	-.13*
White Women	-.338***
IL_Black	-.244**
IL_Latino	-0.0366
IL_Native American	-0.504
IL_Asian/Pacific Islander	0.0984
IL_Other	0.212
IL_White Women	-0.0293
Adjusted R-Squared	0.424

legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey

Table F17. Partial Results from Log-linear Regression Analysis

Construction-related Services , 2007-2011

Dependent Variable: Logarithm of Business Earnings	
Independent Variable	Coefficient
Black	-.577***
Latino	-0.0634
Native American	-0.386
Asian/Pacific Islander	-.206*
Other	-1.03
White Women	-.608***
IL_Black	0.558
IL_Latino	0.529
IL_Native American	(omitted)
IL_Asian/Pacific Islander	-2.02**
IL_Other	(omitted)
IL_White Women	-0.612
Adjusted R-Squared	0.094
legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American Community Survey

Table F18. Partial Results from Probit Regression Analysis

Construction-related Services , 2007-2011

Dependent Variable: Probability of Forming a Business	
Independent Variable	Coefficient
Black	-0.375
Latino	-0.079
Native American	-0.048
Asian/Pacific Islander	-0.334
Other	-0.342
White Women	-0.009
IL_Black	-0.003
IL_Latino	-0.133
IL_Native American	(omitted)
IL_Asian/Pacific Islander	-0.124
IL_Other	(omitted)
IL_White Women	0.129
Pseudo R-Square	0.131

Source: CHA calculations from the American Community Survey

Glossary

ACS: The American Community Survey. The Census Bureau's ACS is an ongoing survey covering the same type of information collected in the decennial census.

BEP: The Business Enterprise Program of the State of Illinois

CDB: The Capital Development Board of the State of Illinois, the construction management agency for Illinois state government.

CMS: The Department of Central Management Services of the State of Illinois, responsible for procurement and business diversity, among other services.

DBE: Disadvantaged Business Enterprise, as defined in 49 C.F.R. Part 26.

Disparity ratio (or disparity index): A measure derived from dividing utilization by availability and multiplying the result by 100. A disparity ratio of less than 100 indicates that utilization is less than availability. A disparity ratio of 80 or less can be taken as evidence of disparate impact.

FBE: Woman-Owned Business Enterprise

Intermediate judicial scrutiny: The middle level of Equal Protection Clause scrutiny applied by courts to, among other types of activities, programs based on gender, or government decisions that take gender into account.

MBE: Minority-Owned Business Enterprise.

MSA: Metropolitan Statistical Area, as defined by the federal Office of Management and Budget.

M/FBE: Collectively, Minority-Owned Business Enterprise and Female-Owned Business Enterprise.

NAICS: North American Industry Classification System. The standard system for classifying industry-based data in the U.S. Superseded the Standard Industrial Classification (SIC) System in 1997.

PBE: A business owned by a person with disabilities.

PUMS: Public Use Microdata Sample from the decennial census and the American Community Survey.

Rational basis judicial scrutiny: The most minimal level of Equal Protection Clause scrutiny applied by courts to, among other types of activities, programs

based on firm size or location or the firm owner's disability or veteran status, or government decisions that take firm size or location, disability, or veteran status into account.

SBA: United States Small Business Administration

SBA size standards: The size limits used by SBA, contained at 13 C.F.R. 121. Industry specific limits are based on either gross revenues or the number of employees.

SBO: The Census Bureau's *Survey of Business Owners* statistical data series that gathers statistical information on the nation's minority-owned and women-owned business enterprises.

Strict judicial scrutiny: The highest level of Equal Protection Clause scrutiny applied by courts to, among other types of activities, programs based on race or ethnicity, or government decisions that take race or ethnicity into account.

Weighted availability: The availability of a group of vendors as a proportion of the total number of vendors, weighted to reflect the agency's spending patterns in an individual industry sector code.