State of Missouri Office of Administration
DISPARITY STUDY
2014



COLETTE HOLT & ASSOCIATES

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STATE OF MISSOURI
DISPARITY STUDY

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About the Study Team

Colette Holt & Associates (“CHA”) is a national law and consulting firm specializing in disparity studies, affirmative action contracting programs, expert witness services, compliance monitoring and strategic development related to inclusion, diversity and affirmative action. Founded in 1994, it is led by Colette Holt, J.D., a nationally recognized attorney and expert. In addition to Ms. Holt, the firm consists of Steven C Pitts, Ph. D., who serves as the team’s economist and statistician, Robert C. Ashby, J.D., former Deputy Counsel at the US Department of Transportation, who serves as special counsel, Jeremy Jones, B.S, who serves as Assistant Economist, and Research Assistants Denise Oliver, B.S. and Katherine Wiggins, B.A.. CHA is certified as a Disadvantaged Business Enterprise, Minority-Owned Business Enterprise and a Woman-Owned Business Enterprise by numerous agencies.

Abaci Research & Consulting, LLC (“ARC”) is a national firm specializing in data collection and management for disparity studies and other research related to contracting affirmative action programs. President Kim Stewart has almost a decade of experience supporting legally defensible disparity studies and serving as Assistant Project Director. ARC is certified as a Disadvantaged Business Enterprise and a Woman-Owned Business Enterprise by several agencies.

Philips & Associates is a full service market research, data analysis and program evaluation firm that serves clients nationwide. They utilize advanced research tools and survey techniques to gather data, analyze results and report our findings. Founded in 1991, President George Philips directs a staff of research, evaluation and compliance professionals to provide cost effective business solutions to government, public, private and nonprofit organizations nationwide. Philips & Associates is a State of Missouri certified Disadvantaged Business Enterprise and a Minority-Owned Business Enterprise.

Hicks-Carter-Hicks specializes in collecting information from government, public and private organizations and assessing the information to provide accurate analysis and recommendations that improve the organization. Founded in 1999 by Gloria Carter Hicks, the firm specializes in inclusion and organizational change. Hicks-Carter-Hicks is a State of Missouri certified Minority-Owned Business Enterprise and Woman-Owned Business Enterprise.

G&H Consulting, LLC specializes in administrative management in the transportation industry, including diversity training and policy development related to best practices in government, as well as public outreach and community relations. Founded by Gayle Holliday in 1996, the firm focuses on supplier diversity and transportation programs. G&H Consulting, LLC is a State of Missouri certified Minority-Owned Business Enterprise and Woman-Owned Business Enterprise.

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I. Executive Summary

Colette Holt & Associates was retained by the State of Missouri Office of Administration (“OA”) to perform a study of possible disparities in access to state prime contracting and associated subcontracting opportunities on contracts awarded between July 2007 and June 2013 on the basis of race and gender. We explored whether Minority-Owned Business Enterprises (“MBEs”) and Woman-Owned Business Enterprises (“WBEs”), collectively, “M/WBEs”, have equal access to state contracts, and if not, what remedies might be appropriate to redress the barriers created by race or gender discrimination.

A. Study Methodology and Data

The methodology for this Study 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 for state departments of transportation.

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 Missouri’s utilization of M/WBEs 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/WBEs compared to White male-owned firms in the state’s markets?
- Are there disparities between the availability of M/WBEs and their utilization on state contracts? Do any disparities vary based on race, ethnicity or gender, or industry?
- What is the experience of M/WBEs 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 M/WBE Program? How is the program administered?

- What has been the experience of M/WBEs and non-M/WBEs in seeking state work? What has been the effect of the M/WBE 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/WBEs 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/WBEs form business and their earnings from such businesses compared to similar non-M/WBEs, 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/WBEs in Missouri's markets.
- We gathered anecdotal data on M/WBEs through focus groups with business owners and community leaders, a public hearing and interviews with state agency staff. We also evaluated OA's M/WBE program and race- and gender-neutral policies and procedures for their effectiveness and conformance with constitutional parameters and national standards for M/WBE initiatives.

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

B. Study Findings

Overall, we found extensive evidence that discrimination on the basis of race and gender continues to operate in Missouri's markets and that disparities exist between the availability of M/WBEs and their utilization on state contracts and associated subcontracts, as well as throughout the wider Missouri economy. In our judgment, the state has a strong basis in evidence to continue its M/WBE 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 $3 billion to empirically determine the market areas.

Thirty-four North American Industry Classification System ("NAICS") codes defined the product or industry market for the state. Table A presents the distribution of the number of contracts and the amount of contract dollars across the 34 NAICS codes.

Table A: NAICS Code Distribution of Contracts and Contract Dollars, All Funding Sources

NAICS Code	Subsector	Share of Total Contracts	Share of Total Contract Dollars
236220	Commercial and Institutional Building Construction	18.7%	1.1%
238110	Poured Concrete Foundation and Structure Contractors	3.7%	0.2%
238140	Masonry Contractors	2.0%	0.2%
238160	Roofing Contractors	7.5%	0.3%
238210	Electrical Contractors and Other Wiring Installation Contractors	8.9%	0.5%
238220	Plumbing, Heating, and Air-Conditioning Contractors	9.1%	0.9%
238910	Site Preparation Contractors	5.6%	0.6%
332312	Fabricated Structural Metal Manufacturing	2.8%	0.2%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	0.6%	11.6%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	0.1%	0.0%
424410	General Line Grocery Merchant Wholesalers	1.5%	2.7%

Table A: NAICS Code Distribution of Contracts and Contract Dollars, All Funding Sources, cont'd.

NAICS Code	Subsector	Share of Total Contracts	Share of Total Contract Dollars
441110	New Car Dealers	2.5%	1.5%
446110	Pharmacies and Drug Stores	0.5%	1.8%
485410	School and Employee Bus Transportation	0.3%	1.2%
518210	Data Processing, Hosting, and Related Services	1.0%	1.8%
522120	Savings Institutions	0.1%	0.2%
522220	Sales Financing	0.1%	2.0%
524114	Direct Health and Medical Insurance Carriers	0.9%	36.7%
524292	Third Party Administration of Insurance and Pension Funds	0.1%	0.0%
541110	Offices of Lawyers	0.4%	0.0%
541219	Other Accounting Services	0.4%	6.8%
541330	Engineering Services	11.3%	0.2%
541511	Custom Computer Programming Services	1.4%	1.8%
541512	Computer Systems Design Services	8.1%	6.7%
541611	Administrative Management and General Management Consulting Services	0.9%	0.0%
541618	Other Management Consulting Services	4.4%	6.9%
541810	Advertising Agencies	2.4%	0.8%
561422	Telemarketing Bureaus and Other Contact Centers	0.8%	1.3%
561499	All Other Business Support Services	1.4%	0.3%
621210	Offices of Dentists	0.1%	1.1%
621420	Outpatient Mental Health and Substance Abuse Centers	0.3%	6.2%
623990	Other Residential Care Facilities	1.4%	3.0%
624310	Vocational Rehabilitation Services	0.6%	1.1%
624410	Child Day Care Services	0.3%	0.4%
Total		100.0%	100.0%

Source: CHA analysis of Missouri agency data.

We next determined the locations of firms in those 34 NAICS codes to establish the industries in which the state purchases. Seventy-eight percent of the state's dollars were spent in the State of Missouri. Therefore, we used Missouri as the geographic market. Table B presents those Missouri counties that account for 78 percent of the total spend.

Table B: Geographic Percentage Distribution of Contracts In Missouri

COUNTY	COUNTY PCT	PCT TOTAL
Cole	21.0%	21.0%
St. Louis	18.3%	39.3%
Jackson	10.0%	49.3%
Greene	8.9%	58.2%
Boone	8.2%	66.4%
St. Louis City	5.1%	71.4%
Clay	2.4%	73.8%
Jefferson	1.5%	75.4%
Johnson	1.4%	76.8%
St. Francois	1.4%	78.1%

Source: CHA analysis of Missouri agency data.

2. The State's Utilization of Minority- and Women-Owned Firms

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

One finding is that utilization of M/WBEs is highly concentrated by subsector, with a few subsectors accounting for the large majority of utilization. M/WBEs received very few dollars in several subsectors. Table C presents data on the distribution of contract dollars by NAICS code for MBEs, WBEs, M/WBEs, and non-M/WBEs.

Table C: Industry Percentage Distribution of Contract Dollars

NAICS	MBE	WBE	M/WBE	Non-M/WBE	Total
236220	0.6%	22.5%	23.1%	76.9%	100.0%
238110	5.3%	29.0%	34.2%	65.8%	100.0%
238140	1.5%	0.3%	1.8%	98.2%	100.0%
238160	5.2%	15.9%	21.0%	79.0%	100.0%
238210	30.4%	9.9%	40.3%	59.7%	100.0%
238220	0.2%	1.5%	1.7%	98.3%	100.0%
238910	0.6%	2.4%	2.9%	97.1%	100.0%
332312	0.0%	4.9%	4.9%	95.1%	100.0%
423430	100.0%	0.0%	100.0%	0.0%	100.0%
424210	0.0%	0.0%	0.0%	100.0%	100.0%
424410	0.0%	0.1%	0.1%	99.9%	100.0%
441110	0.0%	0.0%	0.0%	100.0%	100.0%
446110	50.5%	0.0%	50.5%	49.5%	100.0%
485410	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	100.0%	100.0%
522120	0.0%	0.0%	0.0%	100.0%	100.0%
522220	0.0%	0.0%	0.0%	100.0%	100.0%
524114	0.0%	0.0%	0.0%	100.0%	100.0%
524292	100.0%	0.0%	100.0%	0.0%	100.0%
541110	0.0%	0.0%	0.0%	100.0%	100.0%
541219	0.0%	0.0%	0.0%	100.0%	100.0%
541330	13.4%	4.2%	17.5%	82.5%	100.0%
541511	54.1%	1.5%	55.6%	44.4%	100.0%
541512	55.4%	17.0%	72.4%	27.6%	100.0%
541611	0.0%	0.0%	0.0%	100.0%	100.0%
541618	0.5%	18.4%	18.9%	81.1%	100.0%
541810	3.7%	15.1%	18.9%	81.1%	100.0%
561422	65.5%	0.0%	65.5%	34.5%	100.0%
561499	93.9%	2.2%	96.1%	3.9%	100.0%
621210	100.0%	0.0%	100.0%	0.0%	100.0%
621420	0.0%	0.0%	0.0%	100.0%	100.0%
623990	0.0%	0.0%	0.0%	100.0%	100.0%
624310	0.0%	0.0%	0.0%	100.0%	100.0%
624410	0.0%	0.0%	0.0%	100.0%	100.0%
TOTAL	19.7%	3.0%	22.7%	77.3%	100.0%

Source: CHA analysis of Missouri agency data.

3. Availability of Minority- and Women-Owned Firms in Missouri's Market

Using the "custom census" approach to estimating availability and the further assignment of race and gender using the Master Directory and misclassification surveys, we found the aggregated weighted availability of M/WBEs to be 19.43 percent. Table D presents the weighted availability data for various racial and gender categories.

Table D: Aggregated Weighted Availability

Demographic Group	Weighted Availability
Black	**6.23%**
Hispanic	**1.15%**
Asian	**0.89%**
Native American	**0.77%**
MBE	**9.03%**
White Women	**10.40%**
M/WBE	**19.43%**
Non-M/WBE	**80.18%**

Source: CHA analysis of Missouri agency data; Hoovers; CHA Master Directory.

4. Disparity Analysis of Missouri's Utilization of Minority- and Woman-Owned Firms

We next compared the utilization of M/WBEs with the availability of M/WBEs. This is known as the "disparity ratio" or "disparity index." A disparity ratio measures the participation of a group in the government's contracting opportunities by dividing that group's utilization by the availability of that group, and multiplying that result by 100 percent. Courts 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.[1]

[1] 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.").

We determined that the disparity ratios were substantively significant for all groups except Asians,[2] and statistically significant for non-M/WBEs.[3] 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 E presents the results of this disparity analysis by demographic group for state-funded contracts.

Table E: Disparity Ratios by Demographic Group

Demographic Group	Disparity Ratio
Black	60.2%*
Hispanic	6.5%*
Asian	578.6%
Native American	24.3%*
White Women	32.8%*
MBE	101.4%
M/WBE	64.7%*
Non-M/WBE	109.0%**

*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 Missouri 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/WBEs in Missouri form firms; and their earnings from those firms. Next, we summarized the literature on barriers to equal access to commercial credit. Finally, we summarized the literature on barriers to equal access to human capital. All three types of evidence have been found by the courts to be relevant and probative of whether a government will be a passive participant in overall marketplace discrimination without some type of affirmative interventions. Data and literature analyzed were the following:

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2 Asians received dollars in only three NAICS codes. They received 55.1 percent of the dollars in codes 541511 and 541512, which accounted for 99.3 percent of all the dollars received by this group. Asians received 0.5 percent of the dollars in 541618.

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

- 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, 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 Missouri 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/WBEs. To collect this evidence, we interviewed 197 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:

- <u>Unequal access to industry and information networks</u>: M/WBEs often felt excluded or were forced to make extra efforts to create networks to connect with key decision makers, industry colleagues and potential clients.

- <u>Discriminatory attitudes and negative perceptions of competency</u>: Minorities and women reported negative perceptions of and attitudes about their capabilities by other firms and government officials. Many M/WBEs had to meet higher performance standards than White-male owned businesses. Women related the continuing effects of stereotypes about gender roles and sexist behavior from male colleagues and clients. Hispanic owners had experienced additional bias regarding their immigration status and that of their employees' and subcontractors.

- Obtaining public sector work on an equal basis: Most minority and women owners were adamant that inclusion programs remain critical to reduce barriers to equal contracting opportunities and to level the playing field. Firms receive little or no work without the impetus of goals.

- Obtaining private sector or "no goals" work on an equal basis: Most participants had not been very successful in accessing private sector projects 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.

7. M/WBE Program Elements and Implementation

OA's first formal efforts to increase opportunities for M/WBEs began in 1990. In 1994, Executive Order 94-03 established a goal of awarding at least 5 percent of contracts to MBEs. A Disparity Study completed in 1996 found significant underrepresentation of M/WBEs, especially those owned by Blacks, White females, and Hispanics. Because of the small number of observations, the disparities for Asian-owned and Native American-owned firms were not large. The Study also presented anecdotal information on discriminatory barriers. Based on these findings, Governor Mel Carnahan signed Executive Order 98-1, which increased the goals for contracts greater than $100,000 to 10 percent for MBEs and 5 percent for WBEs. In 2005, as the result of a lawsuit successfully challenging the M/WBE program, Governor Matt Blunt signed Executive Order 05-30, which provides for flexible goals of 10 percent for MBEs and 5 percent for WBEs.

The Office of Equal Opportunity ("OEO") within OA is responsible for the implementation of the M/WBE program. OEO's mission is to promote a diversified workforce within state government and to increase the level of opportunities for M/WBEs seeking to contract with the state. OEO's primary functions include certification of firms seeking to participate in the program and maintenance of the database of certified vendors; advocacy for M/WBEs; education and outreach, including maintenance of the website and publication of the OEO Newsletter; matchmaking activities between certified firms, state agencies and prime contractors; data gathering; and monitoring and reporting activities.

Important program elements include certifying firms that meet specific criteria for ownership, management and control by minorities or women; contract award procedures, including setting goals on contracts greater than $25,000; and reporting and monitoring requirements for prime contractors.

To evaluate the implementation of these elements and whether they are narrowly tailored, we interviewed 197 firm owners and representatives, as well as state agency staff members. We solicited input about their experiences and suggestions for changes or improvements. Topics included:

- <u>Access to information about contracting policies and processes, and opportunities</u>: Many participants reported that it is difficult to access information about opportunities on state contracts, especially with the smaller agencies, and requested more assistance with navigating the bureaucracy.

- <u>Contract size and specifications</u>: The size of the contracts was a major barrier for small firms, and experience requirements often shut them out of projects; and;

- <u>Access to bonding and financing</u>: The inability to obtain bonding and financing are major barriers to participation by M/WBEs in state contracts.

- <u>Program administration resources</u>: There was a broad consensus that OEO needs more resources to administer the program and fulfill its remedial objectives.

- <u>Outreach to M/WBEs</u>: Greater efforts to conduct outreach to M/WBEs, by both state agencies and prime vendors, was repeatedly recommended.

- <u>Technical assistance and supportive services</u>: M/WBEs and prime vendors supported more training and assistance to M/WBEs. Several participants suggested partnering with the Missouri Department of Transportation, which provides well-regarded supportive services to minority- and women-owned firms.

- <u>Access to prime contract opportunities</u>: There was broad support for a race- and gender-neutral small business setaside on smaller contracts.

- <u>Mentor-protégé relationships</u>: Many owners 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.

- <u>M/WBE certification standards and processes</u>: A faster and more streamlined process, perhaps with reciprocal certification by other governments, was suggested. Some participants recommended limiting program participation to firms under a certain size.

- Meeting M/WBE contract goals: Experiences with meeting goals varied. Most prime contractors try to comply with the state's program and meet the contract goals. Firms in industries with few subcontracting opportunities or those who work on smaller jobs reported it was particularly difficult for them to meet goals. Compliance can be resource intensive, and several general contractors found the process difficult and frustrating. Many also thought it is more expensive and risky to use M/WBEs. Short deadlines for bid submission exacerbated the challenge. Alternative procurement methods such a construction manager, construction manager at risk, design build, or qualifications-based selections offer more flexibility. Some prime vendors reported inconsistent application of the guidelines or lack of feedback. Several participants reported that in their experience, meeting goals on state contracts was optional. Contract-specific goals were urged by many general contractors. Some specialty trade construction contractors stated that they are often shut out of opportunities by the program. Several general contractors deemed contacting affirmative action programs in general to be mostly ineffective. A few general contractors stated that M/WBEs do not want to work on private sector or no-goals projects despite being actively solicited.

- Contract performance monitoring and enforcement: More monitoring of actual utilization of subcontractors was needed. While a prime vendor is permitted to substitute a non-performing M/WBE after contract award, several primes reported that they rarely seek approval.

8. Recommendations

Based on these findings, we make the following recommendations.

- Increase access to state contracting information: Examine each major agency's current policies and provide best practices regarding vendor outreach and management, and user-friendly access for potential bidders and proposers. Continue and enhance, as needed, OA's recent procurement system improvements.

- Increase outreach to M/WBEs: Conduct additional events, seminars and training opportunities. Require prime vendors to register their interest in specific solicitations to facilitate contacts with M/WBEs. Focus special outreach on industries with little M/WBE participation.

- Lengthen solicitation times: Longer windows to solicit and M/WBE participation should increase the ability to meet goals.

- Review contract sizes and scopes: "Unbundle" appropriate contracts by dollars, scopes or locations.

- Adopt “quick pay” policies: Payments every two weeks will facilitate M/WBEs to serve as prime contracts and subcontractors.

- Review surety bonding and experience requirements: Consider removing the cost of the bond from the calculation of “as read” low bidder and increasing the dollar threshold below which bonds are not required. Review qualification requirements to ensure that M/WBEs and small firms are not unfairly disadvantaged and that there is adequate competition for state work.

- Ensure bidder non-discrimination and fairly priced subcontractor quotations: To address concerns about price gouging by M/WBEs and bid shopping by prime contractors, require bidders to maintain information on pricing and date of receipt on all subcontractor quotes received on larger projects for a specified minimum time period.

- Adopt a small business setaside: Set aside some smaller contracts for bidding only by certified Small Business Enterprises as a way to create opportunities to work directly with the state.

- Create a small contractor bonding and financing program: Work with a surety to provide bonds for firms that have successfully completed the associated training and mentoring program. Explore working with MoDOT on this initiative.

- Use the Study to set the overall, annual M/WBE goals: Consider setting the state’s aspirational goal at 10 percent for MBEs and 10 percent for WBEs.

- Use the Study to set M/WBE contract goals: The detailed availability estimates in the Study should serve as the starting point for contract goal setting. Consider permitting a flexible approach on particular contracts regarding whether to set a MBE goal and a WBE goal, or a unitary goal that permits MBEs and/or WBEs to be credited towards the goal. Bid some “control contracts” without goals to illuminate whether certified firms are used or even solicited in the absence of goals.

- Partner with other entities to provide technical assistance and supportive services: Serve as an information source or clearinghouse about agencies or organizations that provide services. Provide logistical and financial support to approach programs. Consider working directly with MoDOT to include OEO M/WBEs in MoDOT’s existing efforts.

- Consider adopting a Mentor-Protégé Program: Use MoDOT’s program as a model. Include formal program guidelines; an OEO-approved written development plan; a long term and specific commitment between the parties; extra credit for the mentor’s use of the protégé to meet a contract goal; a fee schedule to cover the direct and indirect cost for services; and regular review by OEO.

- Narrowly tailor program eligibility standards: Adopt personal net worth and size limits. Certify firms seeking to do business in Missouri. Put controls in place and develop procedures for firms wanting to add industry codes to their certification.

- Review M/WBE contract compliance policies and procedures: Provide training to all departments subject to the program and regular updates on best practices. Ensure that meeting the goals or establishing the bidder's good faith efforts to do so should be a condition of responsiveness. Permit only a very short window after bid or proposal submission to submit the full complement of compliance paperwork. Increase desk and onsite monitoring during contract performance. Review all current program policies, procedures, and documents to ensure they remain narrowly tailored and embody best practices.

- Provide training to bidders regarding program compliance: Conduct regularly scheduled training sessions and provide on-line training materials. Focus on how to meet goals, what constitutes making good faith efforts to do so, how to determine a commercially useful function, and the requirements for contract performance and reporting.

- Implement an electronic contracting data collection and monitoring system: Functionality should include contract compliance; full contact information; utilization plan capture; contract goal setting; online certification applications and processing; 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.

The State should develop performance measures for Program success such as 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/WBE substitutions during contract performance; growth in the number, size and scopes of work of certified firms; increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts; and graduation data. Further, regular program reviews should continue, including a sunset date for the State program.

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.[4]

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.[5] 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.

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

[5] *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.[6]

In *Adarand v. Peña,*[7] 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.[8] 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.[9] However, appellate courts have applied strict scrutiny to the gender-based presumption of social disadvantage in reviewing the constitutionality of the DBE program.[10] 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.[11] 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 only the most minimal of legislative consideration; no disparity type evidence is necessary.

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[6] *United States v. Paradise*, 480 U.S. 149, 171 (1987).

[7] *Adarand v. Peña,* 515 U.S. 200 (1995).

[8] While the limitation of the DBE program's benefits to firms owned by "socially and economically disadvantaged" persons is facially race-neutral, the Eighth Circuit and other courts have held that "the program is subject to strict judicial scrutiny, no doubt because the statute employs a race-based rebuttable presumption to define this class of beneficiaries and authorizes the use of race-conscious remedial measures." *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d. 964, 969 (8th Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

[9] *Cf. United States v. Virginia*, 518 U.S. 515 (1996).

[10] *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 720 (7th Cir. 2007) ("*Northern Contracting III*").

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

Unlike most legal challenges, the defendant has the initial burden of producing "strong evidence" in support of a race-conscious program.[12] The plaintiff must then proffer evidence to rebut the government's case, and bears the ultimate burden of production and persuasion that the affirmative action program is unconstitutional.[13] "[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."[14] A plaintiff "cannot meet its burden of proof through conjecture and unsupported criticism of [the government's] evidence."[15] For example, in the challenge to the Minnesota and Nebraska DBE programs, the Eighth Circuit held that "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."[16] When the statistical information is sufficient to support the inference of discrimination, the plaintiff must prove that the statistics are flawed.[17] 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.[18]

There is no need of formal legislative findings of discrimination,[19] nor "an ultimate judicial finding of discrimination before [a local government] can take affirmative steps to eradicate discrimination."[20]

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

13 *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).

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

15 *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).

16 *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.").

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

18 *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).

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

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

To meet strict scrutiny, studies have been conducted that gather the statistical and anecdotal evidence necessary to support the use of race- and gender-conscious measures to combat discrimination. These are commonly referred to as “disparity studies” because they analyze any disparities between the opportunities and experiences of minority- and women-owned firms and their actual utilization compared to white male-owned businesses. Quality studies also examine the elements of the agency’s programs to determine whether they are sufficiently narrowly tailored. The following is a detailed discussion of the parameters for conducting studies leading to defensible programs that can 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.[21] 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

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

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

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[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.

Richmond's minority population because not all minority persons would be qualified to perform construction projects; general population representation is irrelevant. No data were presented about the availability of MBEs in either the relevant market area or their utilization as subcontractors on City projects. According to Justice O'Connor, the extremely low MBE membership in local contractors' associations could be explained by "societal" discrimination or perhaps Blacks' lack of interest in participating as business owners in the construction industry. To be relevant, the City would have to demonstrate statistical disparities between eligible MBEs and actual membership in trade or professional groups. Further, Richmond presented no evidence concerning enforcement of its own anti-discrimination ordinance. Finally, 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 thirty 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.

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[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).

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 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:

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

30 *Id*. at 502.

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

> [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 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, for example, the Disadvantaged Business Enterprise program for U.S. Department of Transportation contracts[33] avoids these pitfalls. Part 26 "provides for a flexible system of contracting goals that contrasts sharply with the rigid quotas invalidated in *Croson*."[34]

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. The application of strict scrutiny need not be "fatal in fact."

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

It is well established that disparities in an agency's utilization of Minority- and Women-Owned Business Enterprises ("M/WBEs") and their availability in the relevant marketplace provide a sufficient basis for the consideration of race- or

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[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] 49 C.F.R. Part 26.

[34] *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).

gender-conscious remedies. Proof of the disparate impacts of economic factors on M/WBEs and the disparate treatment of such firms by firms or individuals 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.[35] Specific evidence of discrimination or its absence may be direct or circumstantial, and should include economic factors and opportunities in the private sector affecting the success of M/WBEs.[36]

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."[37]

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."[38] 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 Industry and Geographic Market Areas

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,

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

[36] *Id*.

[37] *Concrete Works IV*, 321 F.3d at 976.

[38] *Id*. at 977.

based on national data considered by Congress.[39] To ensure that the program meets strict scrutiny, the state must therefore empirically establish its geographic market area– where it purchases goods and services– and its industry or product market area– what goods and services it purchases. This is a fact driven inquiry; it may or may not be the case that the market area is the government's jurisdictional boundaries.[40]

A commonly accepted definition of geographic market area for disparity studies is the locations that account for at least 75 percent of the agency's contract and subcontract dollar payments.[41] 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 to define the industry market area.[42]

2. Examine Disparities Between M/WBE Availability and the State's Utilization of M/WBEs

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

> Where there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise… In the extreme case, some form of narrowly tailored racial preference might be necessary to break down patterns of deliberate exclusion.[43]

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.[44] An index less than 100

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[39] *Croson*, 488 U.S. at 508.

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

[41] *"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").

[42] *Id*. at pp. 50-51.

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

[44] *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).

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.[45]

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 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.[46]

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."[47] 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*."[48]

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.[49]

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[45] 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.

[46] *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").

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

[48] *Id*. at 987-88 (emphasis in the original).

[49] *Id.* at 971.

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.[50]

Next, an agency need not prove that private firms' discriminatory conduct intentionally seeks to disadvantage minorities and women.

> Denver's only burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and link its spending to that discrimination…. Denver was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. To impose such a burden on a municipality would be tantamount to requiring proof of discrimination and would eviscerate any reliance the municipality could place on statistical studies and anecdotal evidence.[51]

Similarly, statistical evidence by its nature cannot identify the individuals responsible for the discrimination.[52]

3. Examine 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"[53] 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.[54] As the Eleventh Circuit has acknowledged, "the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market."[55] 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."[56] Unremediated markets analysis

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[50] *Id*. at 973 (emphasis in the original).

[51] *Id*. at 971.

[52] *Id*. at 973.

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

[54] *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).

[55] *Engineering Contractors II*, 122 F.3d at 912.

[56] *Adarand VII*, 228 F.3d at 1174.

addresses whether the government has been and continues to be a "passive participant" in such discrimination, in the absence of affirmative action remedies.[57] 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 gender-conscious measures.[58] Evidence of unremediated markets "sharpens the picture of local market conditions for MBEs and WBEs."[59]

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. Analyze 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, their utilization in the wider economy 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.[60] 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

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

[58] *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.

[59] *Concrete Works II*, 36 F.3d at 1529.

[60] *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, including data from the Census Bureau's American Community Survey and the Survey of Business Owners).

> construction contracts and the channeling of those funds due to private discrimination. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination, precluding from the outset competition for public construction contracts by minority enterprises. The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination, precluding existing minority firms from effectively competing for public construction contracts. The government also presents further evidence in the form of local disparity studies of minority subcontracting and studies of local subcontracting markets after the removal of affirmative action programs.… The government's evidence is particularly striking in the area of the race-based denial of access to capital, without which the formation of minority subcontracting enterprises is stymied.[61]

Business discrimination studies and lending formation studies based on Census Bureau data 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."[62] 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.[63] 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

[61] *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).

[62] *Id*.

[63] *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*");

construction businesses, and of barriers to entry. In rebuttal, [the plaintiffs] presented evidence that the data were susceptible to multiple interpretations, but they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts. Thus, they failed to meet their ultimate burden to prove that the DBE program is unconstitutional on this ground.[64]

5. Evaluate 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."[65] 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.[66] 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."[67] "[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, the possibility that [anecdotal] evidence not reinforced by statistical evidence, as such, will be enough."[68]

There is no requirement that anecdotal testimony be "verified" or corroborated, which is the correct 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

[64] *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.").

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

[66] *Adarand VII*, 228 F.3d at 1168-1172.

[67] *Concrete Works II*, 36 F.3d at 1520, 1530.

[68] *Engineering Contractors II*, 122 F.3d at 926.

witness' perspective and including the witness' perception."[69] Likewise, the Tenth Circuit held that "Denver was not required to present corroborating evidence and [plaintiff] was free to present its own witnesses to either refute the incidents described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry."[70]

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

Even if Missouri 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.[71]

1. Consider Race- and Gender-Neutral Remedies

Race- and gender-neutral approaches are a necessary component of a defensible and effective M/WBE program[72] and the failure to seriously consider

[69] *Id.* at 249.

[70] *Concrete Works IV*, 321 F.3d at 989.

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

[72] *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

such remedies has been fatal to several programs.[73] Difficulty in accessing procurement opportunities, restrictive bid specifications, excessive experience requirements, and overly burdensome insurance and/or bonding requirements, for example, might be addressed by the state's Office of Administration ("OA") 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.[74] Further, governments have a duty to ferret out and punish discrimination against minorities and women by their contractors, staff, lenders, bonding companies or others.[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 MBE and WBE Goals

Numerical goals or benchmarks for M/WBE 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

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consider race-neutral method of promotions suggested a political rather than a remedial purpose).

[73] *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.

[74] *See* 49 CFR § 26.51.0.

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

[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.

goals for DBE participation in the relevant contracting markets. This stands in stark contrast to the program struck down in *Croson*."[80]

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.

The Eighth Circuit has recognized that goal setting is not an absolute science. In holding the DBE regulations to be narrowly tailored, the court noted that "[t]hough the underlying estimates may be inexact, the exercise requires the States to focus on establishing realistic goals for DBE participation in the relevant contracting markets."[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/WBEs 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/WBE 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

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80 *Id.*

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.").

program.[86] This feature has been central to the holding that the DBE program meets the narrow tailoring requirement.[87]

4. Review Program Eligibility for 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

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

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

[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*

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 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/WBE 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/WBEs and other small businesses may result in a finding that the program unduly burdens non-M/WBEs.[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."

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

[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.3 at 1183 ("While there appears to be no serious burden on prime contractors, who are obviously compensated for any additional burden occasioned by the employment of DBE subcontractors, at the margin, some non-DBE subcontractors such as *Adarand* will be deprived of business opportunities"); *cf. Northern Contracting II*, at *5 ("Plaintiff has presented little evidence that is [sic] has suffered anything more than minimal revenue losses due to the program.").

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 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]

[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).

[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.

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 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]

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

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.

III. State of Missouri's Minority- and Woman-Owned Business Enterprise Program

This Chapter describes the State of Missouri's Minority- and Woman-Owned Business Enterprise ("M/WBE") program for state-funded contracts, followed by the results of the business owner interviews discussing the program.

A. History of the State's Minority- and Woman-Owned Business Enterprise Program

The State's formal efforts to increase opportunities for M/WBEs began in 1990, when the Office of Administration ("OA") was directed to "establish and implement a plan to increase and maintain the participation of certified socially and economically disadvantaged small business concerns or minority business enterprises, directly or indirectly, in contracts for supplies, services, and construction contracts, consistent with goals determined after an appropriate study is conducted to determine the availability of socially and economically disadvantaged small business concerns and minority business enterprises in the marketplace."[111]

In 1994, Governor Mel Carnahan signed Executive Order 94-03, which established a goal of awarding at least 5 percent of contracts awarded by executive branch departments to minority-owned business enterprises ("MBEs"). The Department of Economic Development began the process of procuring a disparity study in 1994, which was completed in 1996.

The study[112] analyzed M/WBE utilization data from 1989 through 1994 on contracts awarded by OA, the Department of Economic Development and the Department of Revenue (for the state lottery). During the study period, less than one percent of total dollars went to MBEs and only 2.2% to WBEs. This contrasted to availability: in construction, for example, 13% of the firms were Black-owned, 1.2% were Asian-owned, 2.75% were Hispanic-owned, .03 % were Native American-owned, and 11.1% were White women-owned. M/WBE availability in other industries was similar. Based on these estimates, the study found significant underrepresentation of M/WBEs firms, especially those owned by Blacks, White females, and Hispanics. Because of the small number of observations, the disparities for Asian-owned and Native American-owned firms were not large.

The study noted that most state contracts were small (i.e., $50,000 or less), meaning that firms did not require extensive capacity in order to be able to perform them.

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[111] Senate Bills 808 and 672 (1990), 37.020.2, RSMo.

[112] State of Missouri Disparity Study, Mason Tillman Associates LTD., 1996.

Following a lengthy history of discrimination against Blacks in the state, and its economic effects, the study related the anecdotal information gathered in interviews with M/WBE firm owners. The problems cited included difficulty getting loans; late payments; bonding and insurance issues; harassment and retaliation; closed networks (*e.g.*, the “good ole boy network” barrier); bid shopping (reported by more than half of the interviewees); prime contractors evading good faith efforts requirements (reported by over 60 percent of interviewees); failure of state agencies to inform firms of bid opportunities; burdensome certification requirements; and not getting work with firms even after submitting the low quote.

Based on the findings of the study, Governor Carnahan signed Executive Order 98-1, which increased the goals for contracts greater than $100,000 to 10 percent for MBEs and 5 percent for WBEs.

In 2005, as the result of a lawsuit successfully challenging the State’s M/WBE program, Governor Matt Blunt signed Executive Order 05-30, which provides in part:

> PMM [Division of Purchasing and Materials Management] shall be authorized to encourage prime contractors to subcontract with M/WBEs on all contracts of $100,000 or greater. OSWD [Office of Supplier and Workforce Diversity] contracts shall include a provision for participation which will allow the bidders to tailor a plan to fit the contract. Mandatory percentage goals of M/WBE participation shall not be established in violation of federal or state law. M/WBE participation shall be encouraged by PMM in consultation with OSWD and the user agency depending on the availability of M/WBE vendors in the applicable commodity/service and geographical area. PMM shall consider M/WBE participation as a significant factor in a contract bid. The M/WBE participation will be evaluated along with other criteria in the award of a bid. It is intended that 10% MBE and 5% WBE percentage is desired. The participation can be met through the use of prime contractors, subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful opportunities for M/WBE participation.… The programs shall be reviewed annually to monitor the level of M/WBE participation achieved in state contracting areas during the previous year. An assessment of the programs and whether their continuation is necessary shall be delivered to the Governor and the General Assembly. After it is determined that M/WBEs participate in state contracts in a manner commensurate with their presence and capability in the state marketplace, the programs set forth in section 2 will be terminated.[113]

In 2010, Executive Order 10-24, issued by Governor Jay Nixon, superseded paragraph one (1) of Executive Order 05-30, whereby changing the name of OSWD to the Office of Equal Opportunity (OEO). Executive Order 10-24 focused

[113] http://www.sos.mo.gov/library/reference/orders/2005/eo05_030.asp.

primarily on equal employment opportunity and workforce diversity in the executive branch of state government. It did not change the 10% MBE and 5% WBE contract goal percentages that were established by Executive Order 05-30.

B. Program Administration

The Office of Equal Opportunity ("OEO") within the Office of Administration ("OA") is responsible for the implementation of the M/WBE program as established by Executive Order 05-30. OEO exists to promote a diversified workforce within state government and to increase the level of opportunities for M/WBEs seeking to contract with the state. OEO's primary functions include certification of firms seeking to participate in the program and maintenance of the database of certified vendors; advocacy for M/WBEs; education and outreach, including maintenance of the website and publication of the OEO Newsletter; matchmaking activities between certified firms and state agencies and prime contractors; data gathering; monitoring and reporting activities.

1. Office of Administration Staffing and Responsibilities

OEO is staffed by the Director, who is appointed by the Governor and reports to the Commissioner of Administration. The Director has primary responsibility for:

- Assisting in the coordination and implementation of affirmative action throughout all departments of the executive branch of state government, including programs to increase M/WBE participation;
- Reviewing departments' progress reports;
- Making reports to the Commissioner and the Governor; and
- Advising the Governor on issues regarding equal employment opportunity, affirmative action, and efforts to administer affirmative action goals and timetables for implementation throughout the departments of the executive branch.

In addition to the Director, OEO has one Certification Specialist; one full time Certification Officer; one part-time Certification Officer; one Management Analyst; and one part-time Intern-Office Support Assistant. OEO also utilizes some independent contractors to conduct site visits.

OEO's responsibilities include:

- Recruiting, facilitating and serving as a clearinghouse for M/WBE contractors to participate in the programs;
- Cooperating with the Division of Purchasing and Materials Management ("DPMM") within OA and the Facilities Management, Design and

Construction ("FMDC") within OA in the administration and enforcement of the M/WBE program, and in the development of policies, forms, and procedures to carry out the requirements of the M/WBE program;

- Participating in M/WBE goal setting;
- Performing fact-gathering and record-keeping to determine both the effectiveness of state participation programs and the availability and utilization of eligible M/WBEs on individual projects, including levels of participation and availability in specific areas;
- Certifying contractors as M/WBEs;
- Assessing the continuing need for M/WBE goals for specific contracting areas;
- Monitoring contractor participation with M/WBE goals; and
- Recommending sanctions for contractors who fail to faithfully execute M/WBE participation plans during the course of contract performance.

2. Program Goals and Objectives

All state agencies are to make every feasible effort to procure 10 percent of their goods and services from MBEs and 5 percent from WBEs. Subcontracting with certified firms is encouraged for all contracts of $100,000 or greater. Goals are not to operate as quotas. Agencies may apply the 10 percent MBE goal and the 5 percent WBE goal to contracts estimated to be greater than the informal contract threshold of $25,000.

3. Program Eligibility Criteria and Certification Processes

OEO defines a MBE as a for-profit firm that is at least 51 percent owned, managed and controlled by one of more minority individuals. A minority individual is defined as a citizen or lawfully admitted permanent resident of the United States who is a member of one of the following groups: Black American, Hispanic American, Native American, Asian-Pacific American, Asian Indian American, Alaskan Native, Pacific Islander and Aleut and other similar racial minority groups.[114]

OEO defines a WBE as a for-profit firm that is at least 51 percent owned and controlled by one or more women.

[114] Missouri Revised Statutes, Chapter 33, § 33.750; 1 CRS 10-17.050. These definitions are consistent with those of 49 C.F.R. § 26.5, "Socially and Economically Disadvantaged Individual."

The applicant has the burden of demonstrating by a preponderance of the evidence that it meets the statutory and regulatory requirements for certification.

There are three types of certification procedures: initial/standard; rapid response; and out-of-state. The rapid response process allows firms certified by another Missouri-based organization to submit minimal additional documentation and it can be completed in a shorter timeframe than the Standard In-State Certification. Out-of-state applicants may only be certified if their home state allows Missouri-based M/WBEs to be certified in that state.

Initial/standard certifications are in effect for three years. Rapid response and out-of-state certifications are effective until the expiration date that appears on the certificate provided to OEO. Firms are required to provide an annual update affidavit.[115]

OEO may authorize a one-year provisional certification in certain circumstances, such as to allow a transition from employment to ownership or to review records not available at the time of the application.

In addition to documentation, on-site visits are conducted for Missouri firms to provide a visual and verbal verification of the M/WBE owner's ability to fulfill certification requirements.

OEO may decline rather than deny certification where questions are identified during the process. Applicants declined certification may respond with additional documentation or clarification within the time stated in the notice.

An applicant denied certification may either wait six months and reapply or it can appeal the determination in writing to the Commissioner of OA within 21 calendar days from receipt of the denial letter. New information will not be considered. The Commissioner's decision is final.

Third parties may file a written challenge to a firm's eligibility. Such challenges are not confidential and the certified firm is notified. OEO will investigate the basis for the challenge and issue a written decision.

OEO may revoke certification if the firms does not meet the statutory or regulatory requirements; its certification is revoked by another entity upon which OEO's certification was based; or the firm falsified or intentionally misrepresented information to OEO.

There are currently approximately 1,540 certified M/WBEs in the OEO Directory.

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[115] 1 CSR 40-1.050.20(l(3), http://www.sos.mo.gov/adrules/csr/current/1csr/1c40-1.pdf.

4. Contract Award Procedures

M/WBE participation is a significant factor in contract evaluation. For a procurement that is not strictly low bid, DPMM's general approach is if the bidder meets the goals, it receives 10 additional points out of 200 total possible points. If the bidder achieves less than the goal(s), it can receive some (unstated) number of points. DPMM has discretion to vary these point totals.

Facilities Management, Design and Construction (FMDC) within OA is authorized to evaluate M/WBE participation in design contracts, as part of the quality-based selection process, for construction projects worth $1.5 million or more. For smaller contracts, FMDC makes special efforts to target M/WBEs as prime contractors.

Goals on construction contracts are set contract-by-contract, based on the availability of M/WBEs in the scopes of work of the contract and the applicable geographic area.

A prime contractor may request a waiver from FMDC if it cannot find enough MBEs or WBEs to perform a Commercially Useful Function so as to meet the goal(s), but there are no standards stated for evaluation of the waiver request.

5. Monitoring and Reporting Requirements

Prime contractors submit monthly reports reflecting MBE/WBE subcontractor usage to DPMM, to monitor compliance with the contractual commitments. The division (DPMM) may waive this reporting requirement at any time for good cause. However, if there are multiple services and/or regions, the report provides only overall utilization, not further disaggregation.

OEO has authority to conduct on-site inspections and an administrative review of a certified firm at any time without prior notification.

If a contractor is unable to meet its M/WBE participation level, or if there are other reasons the contractor needs to replace an entity, the contractor must obtain written approval from the division prior to replacing the entity. If approved, the contractor must obtain other participation in compliance with its original commitment as approved by the division. If the contractor cannot obtain a replacement, it may apply to the division for a participation waiver by providing documentation detailing all efforts made to secure a replacement and a good cause statement establishing why the participation level cannot be obtained. If the contractor has met its burden of proof, the division may grant a M/WBE waiver for good cause.

If the contractor's participation level or payment to a participating M/WBE entity is less than the amount committed, and no M/WBE waiver for good cause has been obtained, the division may cancel the contract and/or suspend or debar the contractor from participating in future state procurements, or withhold payment to the contractor in an equal amount to the value of the participating commitment less actual payments made by the contractor to the participating entity. If the division determines that a contractor has become compliant with the commitment amount, any withheld funds shall be released.

At the time of contract renewal, a contractor must verify it is meeting its participation level and required payment to all M/WBE entities. If the contractor is not meeting the requirements, the contract renewal shall not be processed unless and until the requirements are satisfactorily met or an M/WBE waiver for good cause is obtained from the division.

DPMM enters participation information into a database. State agencies can review all of the imaged DPMM documents for a contract through the DPMM's website utilizing the 'Awarded Bid & Contract Document Search.'[116]

On a quarterly basis, OEO sends a MBE/WBE participation report to each agency that reflects data regarding the agency's DPMM contracts that have MBE/WBE participation levels. The report also identifies the DPMM buyer for each contract. The report provides the following information:

- Contract Number
- Contractor Name
- Contract Title/Description
- Buyer Name
- Contract Effective Date
- Contract Expiration Date
- Report Date (month last report received)
- MBE participation levels committed to in the contract
- WBE participation levels committed to in the contract
- Cumulative prime contract payments
- MBE percentage achieved based on contract payments to date
- WBE percentage achieved based on contract payments to date
- Committed MBE utilization compared with actual MBE percentage to determine goal achievement
- Committed WBE utilization compared with actual WBE percentage to determine goal achievement

There are sanctions for noncompliance, such as cancellation of the contract, suspension/debarment, or non-renewal of the contract. There is a waiver provision.

[116] http://oa.mo.gov/purch/webimaging/Homepage.htm.

6. OA Procurement Process Enhancements

OA has recently undertaken four important steps to increase access to information and increase accountability. First, OA is in the process of obtaining a new web-based eProcurement system. The objective is to make it easier for vendors to do business with the state and thereby increase competition for state contracts. It should also increase transparency by providing greater visibility into the state's spend on products and services. The new system will also improve access to various public entities' business opportunities.

Next, OA has developed a Contract Management Guide to standardize processes for the management of its contracts. The Contract Management Guide provides clarity as to the roles and responsibilities for individuals having a role in a contract management function, including the contract managers, project managers, OA and other state agencies.

Third, OA established the Contract Oversight Office in August 2014. The function of the COO is to: 1) assist in educating Departments on the required best practices of contract management as outlined in the Contract Management Guide; 2) monitor contractor performance to ensure contractors are meeting their contractual requirements; 3) work with Departments to ensure they are meeting times, scope and budget commitments made to state leadership; and 4) assist Departments with troubleshooting and problem solving when contract and contractor issues arise.

Lastly, a Procurement Manual will be completed and deployed to state agency procurement staff by the end of October 2014. This Procurement Manual is intended to serve as a roadmap for Executive Branch Departments (Departments), which are subject to the procurement authority of chapter 34, RSMo. By following the roadmap, Departments will meet the requirements of procurement statutes, rules and regulations, and executive orders. This Procurement Manual identifies standard procedures to ensure the application of consistent and sound public procurement practices in the acquisition of products and services.

C. Experiences with State Contracting Policies and Procedures and the M/WBE Program

To explore the impacts of race- and gender-neutral contracting policies and procedures and the implementation of the M/WBE program, we interviewed 197 individuals as well as state agency staffers 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 14 sessions by participants.

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.

- [If] we wanted to sell a thousand t-shirts to [the] state of Missouri, we don't know how and where to go bid that.

- When the RFP comes out there [should be] a part of the state website that says, if you're a company that's interested in going after this project, sign up here and put a contact name there. And then large firms can see who the smaller firms are, and smaller firms can see who the larger firms are and then you can make your calls and do your networking. But you're not starting from the pool of every large firm in the world that's going to apply for a job.

- [OA should] let me know when the jobs are going to be coming up before they hit the street [through a procurement forecast].

State staff also suggested making the agencies' websites more user friendly and providing information about specific contracting opportunities by email and through social media.

2. Contract Size and Specifications

The size of state projects was a major barrier for small firms regardless of ownership.

- [In recent years, the state has] made it more difficult for smaller businesses [by bundling contracts into larger procurements], which impacts minority and woman businesses more.

Unbundling projects into smaller contracts was widely supported.

- If the scopes are reduced enough, the project can be handled by the small firm.

- The unbundling works. I see it [being] successful for Chicago firms, minority firms, who can really grow their business. It helps with the bonding issue. And most importantly, it helps increase the cash flow and capacity.… I love that idea.

Many participants listed experience requirements in specifications as impediments to their ability to perform state work.

- There has to be a way to get people that may not have all of the necessary experience, get them into the mix to allow them to be able to compete.… This idea that you have to have three or four or five experiences based on what is out there makes it very difficult for anybody to be able to even get in the game to begin with. Because that's the requirement for prequalification. And if you don't have that they're not even looking at you. So whether or not you have one or half of the experience, you're already not in the game.

- We don't get the opportunity because we haven't had it before.

- They want to know how many of these you did in the last two years.… And the only firms that can actually show that support are incredibly large firms that have businesses throughout the United States. And then they pull from their huge portfolio and there's no way that it is possible that that entire design team has done five in the last two years. So as designers and engineers and architects, we're trained to understand the owner's goals and objectives. And once you limit it to, show me that you've done this exact project, you've closed the door, except for those firms that have done that exact project and it doesn't open it up for new opportunities.

- I see this very strong language with regard to experience needed, with really weak language with regard to minority or women participation.

3. Access to Bonding and Capital

Prime contractors and subcontractors alike agreed that the ability to obtain surety bonding was crucial to M/WBEs' ability to participate on state contracts.

- [Inability to secure surety bonding is] a hurdle that the state could address somehow in the programs.

- Access to capital is still a major issue. Here in St. Louis, we have difficulty in working with banks to get them to work with smaller companies to make loans. And without working capital … they can't compete. And so one of the things that the state I think could do is to develop loan programs.

Inability to obtain financing is a major problem for M/WBEs and has affected their ability to serve as subcontractors and prime vendors.

- Every one of us [general contractors] sitting at the table I think have probably been a bank to a minority firm or more than one. To help them finance to maybe get to that next level. There might even be a few of us that never got paid back.… I do believe that they need access to capital but how do they get that? Or build that credit worthiness? Or maybe the state could loan them money so they could have the capital to go buy equipment.

Slow pay by clients to prime contractors and by prime contractors to subcontractors exacerbates these problems.

- Do we [M/WBEs] have capacity? Absolutely. But if it's a million dollar job that I'm not going to get paid for 120 days and the access to capital as a new company is very, very, very limited.… Ten days would be great, 30 days would be wonderful. But, I've had projects that well over a year I'm still waiting on retainage.

- If people pay you every 30 days and I have a timeframe to finish it at least six months, I can do more work.

- When we have been paid 30, 60, 90 days … any profit is absorbed. So by the time you get paid, that money's already spent.

- [The state should have] a system that affords those [prime] companies to bill more frequently so that the money is able to flow down [to subcontractors]. And then mandate those larger contract holders to do it.

- One of the things that could really help grow capacity too is [to] vastly improve payment terms.… Provide quick access to their working capital.

- That's the number one rule in business: don't run out of cash.

One non-M/WBE doubted that lack of bonding and financing was a problem.

- I hear the capital and bonding comment a lot and I think it's almost an excuse. I think if you gave most of the minority firms that I'm familiar with unlimited capital and unlimited bonding they would end up with unlimited troubles.… If you show that you've done this half million, quarter million, million dollar work for the last four or five years, now you want to stretch to a million and a half, to me that's an easy sell.

4. Program Administration Resources

There was a broad consensus that OEO needs more resources to administer the program and fulfill its remedial objectives. Lack of resources in OEO was a major concern of many M/WBEs and majority-owned prime contractors as well as agency personnel responsible for program implementation.

- They're very understaffed.

- There's only one girl up in Kansas City that takes care of all of [the program issues].

- They don't have the manpower. If you look at who's trying to implement this program now, they don't have the manpower or the resources to do it properly. So to get those resources you have to have successes. You have to have an avenue to sell the program. So that the things that they're doing positive, they have success stories. The program is doing what it's supposed to be doing in certain areas but not in our area. But it's a kept secret. They need to find a way to communicate their success stories and market throughout the state not just here in Jeff City.

5. Outreach to M/WBEs

Greater efforts to conduct outreach to M/WBEs, by both state agencies and prime vendors, was repeatedly mentioned as one approach to increase opportunities.

- In the State of California, when you open an RFP, there is a place to put an ad attached to that RFP that says, I provide this service, looking to subcontract for blah, blah, blah. So anybody who goes to open that RFP can go to that ad space and see anyone else who's out there and has shown an interest in that particular RFP that would provide a subcontracting service. Missouri does not do that and that would be an extremely simple thing that could be done.

- In the Office of Administration, we have people who advocate for minority and women owned business participation. But beyond that [agency], there is very little conversation.… You go to talk to other agencies who really are the people who make the decision, there is really no conversation. What I would suggest is to have an advocate or a champion in each department of the state for minority and women owned businesses. And in MoDOT they really tried to do that by making the district engineer the person who would champion that and that's been pretty successful.

- OEO should [have an ombudsperson to] show you where you need to go to find out [about opportunities and make contacts with state agencies].

- [The state should] set up mechanisms for us to connect. But you have to register that you're going to be a prime and go after it and you have to register that I'm [a M/WBE]. It gives minority- and women-owned businesses opportunities then to look at and see who is going after it instead of the people from the state going, well here's the phone book. Go through it; I can't tell you.

Many participants requested much more assistance with forming relationships between M/WBEs and potential prime vendors. Vendor fairs, networking events, and seminars were possible avenues.

- Help us make those connections. And just not for that project but who has been bidding on work or submitting their [qualifications] for your work so we can start those business connections now before [the state] start[s] advertising.

6. Technical Assistance and Supportive Services for M/WBEs

Many prime contractors urged training for M/WBEs on how to do business. Lack of experience and management skills were cited as factors impeding utilizing subcontractors.

- [The state should] add to their website a webinar or a link or something where once you become certified, you'd get an e-mail saying, here go to this webinar. It talks about how to do things with the state or it gives you more information about how to contract or, how to market yourself.

- Spoon-feeding is quite common. We've had to take our guys off the project, so that our production's going down so that we can go over and help them, show them better ways to do something.

- [The Office of Administration] need[s] to, instead of making us send in so much paperwork, designate an area for helping these people actually be functioning companies.

- In order for them to get started somebody has to sit down with them, either one-to-one, eye-to-eye and say, this is what you need to do in order to get started in this deal.… People who have been in the business for 5, 10, 15, 20 years learn through hard knocks. But sometimes you can't afford to, you've got to eat during this period too. So they've got to learn fairly quickly. Somebody's going to have to tell them, what you need to do, how to get a performance bond, how to get a bid bond, how do you do estimating. You know, what do you need to look at? What kind of overhead are you talking about? Have you taken that into consideration in your bid? Because you don't want to get a bid and then fail. It's to nobody's benefit that they fail.

M/WBEs were reported to often lack the skills to manage the paperwork and reporting requirements for state contracts.

- I'm talking about the prevailing wage sheets, getting them in on time. Even filing out a pay application…. We have everything electronic. Most of them are not.

The Missouri Department of Transportation was repeatedly mentioned as an agency that is providing the types of training and support that help firms to increase their capabilities.

- MoDOT has a very good program in support services.… If it works for MoDOT and the highway [industry], then with minor modification, I'm sure it can work for other type of projects.

- The MoDOT entrepreneurial program that they run I think is fairly extensive and I think it does add benefit.

7. Access to Prime Contract Opportunities

There was significant support for a race- and gender-neutral small business setaside to promote prime contracting by M/WBEs. Under this approach, only firms whose revenues or number of employees are below a specified limit would be eligible to submit bids or proposals. An additional limitation could be that the firm be located in Missouri.

- It would be helpful to have that setaside that way.
- Setting aside is a great idea.
- I thought that would be a good idea.
- [A] small business [setaside] to me makes infinite sense because I do think a number of the issues that a lot of us [M/WBEs] face are a function of size and that creates other attended issues, whether it's the experience, whether it's the size of the bid package, whether there's a name brand entity that you're competing with that is a big institution.

Several large prime contractors also endorsed the concept of small business setasides.

- We're a larger firm so I do believe that if you had a small business set aside I think that would be helpful for us in the industry as a whole so that smaller firms can grow their capacity.
- I like the setaside.
- All the minority [specialty trade] contractors [should] bid directly to [the owner]. Because right now, all the risk gets dumped on us. We want you to get 25 percent and you take the risk and you pay the premium. We don't want to know what's going on.… When we don't meet it, then we get punched and we get the black eye and all of a sudden it's … [our firm is] not doing their part out there.
- The small business setaside for [the Army] Corps of Engineers, I know people that participate in that and it is an advantage to them. They would not be able to get that work if that set aside wasn't there. So I think if that's the goal, for small businesses to have a chance to put their foot in the door, my experience is from the construction side, not purchasing, but it does give an opportunity for them to get experience in something they didn't [have].
- That set aside that we had back in the early 80s helped a lot because we helped these guys get bonded and we showed them. We actually walked

them through and did everything we could to get them what they needed so that they could do it on their own maybe in the future.

8. Mentor-Protégé Relationships

M/WBEs 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.

- Any mentoring that I can get I think would be helpful.

- [Mentor-Protégé Programs] may be something the state needs to look into.… In MoDOT's world, that really works. At least it gets a conversation going with a lot of large companies about their interest and ability to mentor small firms.

- For us, [a mentor-protégé program] worked. All the way up in Chicago. But, it's very labor intensive upfront. And they are sticklers about checking all the facts and details, and making sure that everyone's abiding by the rules they've agreed to. It was just great.

- My mentor and I really built a powerful relationship with one another and that's led to him saying great things about me to other engineers in town. So not only am I getting good work with him and standing out with him, I'm making new friends.… There was a lot of due diligence. It was not an easy thing to get into [MoDOT's] program.

Several large firms supported the concept of working with M/WBEs to grow their capacities.

- Mine are all informal.… It's just us meeting with potential partners and offering them our accounting department, our project management, our estimating, our CAD and BIM department and our resources. Just showing them how we do things and helping them work through pay applications and setting up spreadsheets and accounting programs for them.

Some cautioned that the components of a mentor-protégé program should be carefully crafted.

- The unfortunate part about mentor-protégé relationships that are tied to projects [is] the projects might run two to three years and at the end of that timeframe there is no more mentor-protégé. And it usually takes more than two or three years to find out what's wrong, try to backfill or create some kind of solution for it and then a plan going forward. It takes a lot longer than that. So, it needs to be longer than just a project specific relationship.

- If I have a protégé that works with our company, the other general contractors might not necessarily look at that protégé as someone that they would use. And I didn't have enough work obviously to keep that protégé busy. That's why I think the [name] works very well because it's not really, it's an advisory board. It has an attorney, it has a banker, it has an insurance guy.

9. M/WBE Certification Standards and Processes

While rigorous and requiring a longer processing time than was optimal, most certified firms reported that OEO's policies and processes were fair and necessary.

- In these last few years of getting registered in the entities, they've caught onto [front companies] and [OEO is] asking fabulous questions and they're coming in and checking to see who makes the business decision, who makes the marketing, who does the hiring and firing. So, that's improved considerably in 15 years.

More attention to the types of work for which a firm is certified and credited towards meeting contract goals was urged.

- Part of the state's system allows for you to go in and put in your own code. And that's unusual and that's dangerous, particularly when you are looking at companies who might not want to use you in the way that you are best fitted to be utilized. So that is an open door for front companies. If people have not vetted your ability to do this type of scope of work and particularly because the state has a weak compliance system as far as monitoring and actually ensuring that people are on the job, performing commercially useful functions. When you're able to then have a whole host of codes that no one has in essence checked your ability to do that work, in my opinion it just sets the system up for abuse and misuse. So the state should set the code for the entity that is certifying.

A more streamlined and electronic process, with possible reciprocal certification with other government agencies in the state, was listed as an approach to reduce barriers and increase participation in the program.

- If we're going to ensure an opportunity for more minority businesses and female businesses to participate, we want to try to streamline the certification process where it's not burdensome and cumbersome. So, if you could take the State of Missouri and St. Louis and Kansas City and you have reciprocal certifications there, I believe that that would be an area that is more beneficial. And then you will see more companies possibly certifying.

- It is onerous for all businesses to do the variety of certifications. And that's if you're a specialty or a sub. And for the primes it already is as well because they have to make sure everyone's certifications are current, and they're not only certified by that organization but they're certified by that NAICS code.… It's very difficult to do all this on bid day, do all this checking at one time.… What happens to the minority- and woman-owned business is they often are disqualified because people don't have the information and don't know much about them.

- There's confusion because you have all these different agencies with different certifications and rules specifically about NAICS codes.

Some firm owners, both M/WBEs and prime contractors, were concerned about the lack of size standards for the program.

- There should be a size restriction.

- Anything would be an improvement over what we have.

- A bigger [subcontractor] always gets it because they've got a lower bonding price. Either that or they're already carrying a bond so they're not actually adding that into their bid and so the fact that I would have to go ahead and get the bond and do that is prohibitive.

- I do benefit from being a WBE in the IT consulting business providing professional services. That's [because] almost all of my income is coming from subcontracting. But it also is hard to win that business because there are some large MBE, WBEs in this arena and so when I'm reaching out to some of the big players that come to town for some of the bigger contracts with the state to try and get in on that, they're in there and the smaller MBEs, WBEs are pretty much shut out.

- At some point, these people have to graduate. I understand that still the minority or the women still owns the business. At some point, you're a big person. You move out of the program and what that allows is more capacity to come in behind them.

10. Meeting M/WBE Contract Goals

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

- When we do out state stuff for the state, ten [percent for MBEs] and five [percent for WBEs], is really not an issue.

- I don't want my firm to be the one that gets made an example of so I'm going to try to meet that goal no matter what. I know other firms that are going to just give the finger to them and just do whatever they want, and then if they get slapped later on, then they get slapped later on. We're going to try to do the program like they want to. And we're going to do the best we can.

Many prime vendors felt that meeting the goals was imperative.

- If I want to keep my people employed and I want to keep doing work, I'm going to have to meet that goal.

Firms in industries with few subcontracting opportunities or those who work on smaller jobs reported it was particularly difficult for them to meet goals.

- It's especially difficult I think in the service industry. This program is really geared toward things like construction.

- You don't want to break up part of a true design if you can keep from it on a small project especially.

Compliance can be resource intensive and several general contractors found the process difficult and frustrating.

- It is a requirement and if you don't meet it you can be in breach of contract.… I've got to give subcontracting out anyway. And if I've got MBE, WBEs that's great.… [But] finding qualified people that they can provide that'll meet the requirements the state puts out in their contract [is challenging].

- We do the advertising, we do the calling. It's a very intensive don't get anything out of it experience. [It's] an exercise in futility just to make paperwork for somebody up there [in Jeff City].… I kind of guestimate on a project of a million dollars or somewhere in that neighborhood, even a half million up, I'll spend $1,000 to $1,500 in time, advertising, staff time, things like that to get the job or go after the job even. So I've kind of gotten to the point where I haven't been bidding those jobs just because I don't have the resources to put the effort into going after it and then getting beat out by the contract anyway.

- The biggest problem for us being a small firm is access to those resources especially being right here in the middle of central Missouri where we don't have that networking relationship that would be very important to us.

- It's not just a MBE percentage that you're trying to achieve, there's also other percentages [such as the requirement that the general contractor self-perform a certain percentage of the contract] that you're trying to achieve to meet the overall success of being awarded the project.

The need to be the low bidder for contracts that are not negotiated made it especially challenging to meet goals. Alternative procurement methods such a construction manager, construction manager at risk, design build, or qualifications-based selections offer more flexibility, which would increase M/WBE utilization.

- [Methods other than low bid] would absolutely help.

Short deadlines for bid submission made it more difficult to meet goals.

- They'd get more participation if they [lengthened the time bids or proposals were on the street].

Inconsistent application of the guidelines or lack of feedback was mentioned as a serious problem for prime bidders.

- [Regarding how much assistance is permitted to a M/WBE,] how do you put the rules out there so everybody knows what's to be followed?

- I've been submitting these forms for over ten years and I've never heard a peep. I'm going on no news is good news.… We don't ever get any feedback.

- Our [utilization of] WBEs was creeping down, and we went back to the [state] buyer … we have called him. We have sent e-mails to him. My VP called him initially. I've called him now and left messages. No one has ever returned a call to set up and go in to discuss it.

- I remember Jack Thomas doing this on the [Lambert] Airport expansion project. One of the things he offered to any prime vendor [was] to come in on the front before award of a contract to get an understanding how the Airport approaches good faith efforts. How they're going to count trucking. And so he would have a review. Normally, you have a kickoff meeting and everybody talks about all the good things to start off. He would actually sit down along with my staff to talk about the diversity participation before awarding the contract. So everybody would be on the same playing field.

Some participants reported that in their experience, meeting goals on state contracts was optional.

- We don't have to meet anything.… We just don't fill out the MBE, WBE exhibit saying we're participating in that.… It's optional.

- I've been in several meetings whereby a state representative will say, well we want you to meet the goal, but if you can't make it we'll understand. Now if you tell a GC that we want you to meet the goal but if you can't make it we'll understand, you're not giving them that incentive to go out and seek for a minority- or woman-owned subcontractor. And that to me defeats the whole purpose of these goals that you have. Because if you put a goal in there but you're not enforcing the goals then what's the point of putting the goals in?

Setting goals on specific contracts that reflect the scopes of work, location and the availability of M/WBEs for the project was urged by numerous prime vendors.

- You got to tailor the guidelines to the type of job.

- Have some kind of logical sliding scale goal for large jobs so that those are smaller goals but dollar wise they're going to be significant dollars anyway. But have that smaller so that, again, more people can participate in a larger project as opposed to maybe going out of business.

- I know they tell you to break up the job into smaller pieces so that they can handle them but when you look at the goals that are set for these large projects, which are usually the same goal that you do for small projects, the number is significant.

- There are projects where a requirement doesn't work well at all.

- We're just creating a pass-through when the goals are pushed higher and higher and higher.

M/WBEs were not helped, in the view of some general contractors, by being awarded subcontracts beyond their capabilities.

- You're having to look at maybe putting the contractor well beyond their capacity. Once you do that, you put them in a bad situation because now they're focusing every part of their capacity of their infrastructure, their credit facility, in one project. They've lost market share. Because now they no longer have the ability to go back and look at other projects that are really in their wheelhouse. So we stretch them well beyond what they can do. And it almost starts that series of failures.… Whereas, if they were on a smaller project, they probably would not have failed. Not only that, they wouldn't have lost their market share while they're attending to this very, very large project.… If it was a realistic world, you'd have a very large goal on very, very small projects and you'd have a very smaller goal on very, very large projects. So that it may have more of a sliding scale. And I think that there would be actually more success coming out of that.

Many general contractors asserted that it is more expensive to use M/WBEs.

- There's a little bit of a struggle between absolute low price and meeting some of these goals.

- So many of the owners that we work with don't want to hear … that it costs more to have a minority contractor do this work.… It's just the economics of it.… There's no way that these guys can compete because they've got to come to me to buy the [materials].

- [Using M/WBEs instead of in house personnel] is costing the owner more. And probably reducing quality of it too.

- What kind of a premium are we paying for the MBE, WBE program? Because we're forcing our general contractors in order to get the lowest responsive responsible bid to incorporate a certain goal of MBE, WBEs…. The MBE, WBE contractors aren't dummies. So their prices at times are going to be inflated.

- I will go through the semantics and … make all the calls, the e-mails, the everything. And then when it's all said and done, I don't take them and there's a place on there that says, why didn't you accept them? I had a bid that was ten percent below.

- They're making a lot of money for not doing a whole lot of work.

- It doesn't cost more money to use minority necessarily. It costs more money to use anybody who wasn't low on bid day, which generally speaking is going to be most of the minorities.

Concerns with the qualifications and capacity of M/WBEs were a major source of concern to many general contractors.

- I don't care if it's an MBE firm, a WBE firm or an Indian-owned [firm … hiring unqualified M/WBEs] hurt[s] the whole program.… I'm a believer of helping out MBE WBE firms getting started. But something like that it just flies in the face of everything that we try to do.

- We want to make sure that we are giving the best quality workers, employees, whatever, based on their skillset, not based on something else. And that's what I think it's frustrating is there aren't enough qualified groups and when you're in a bid process for services like we do, there'll be a firm and maybe there's three to choose from that are qualified to do this work in the State of Missouri.

- Nobody in [St. Louis] that we're aware of, any of us large generals, can handle over a million dollars in capacity on electrical, mechanical, the big HVAC stuff.

Some specialty trade construction contractors stated that they are often shut out of opportunities by the program.

- Our company started in ‘69 and … we’re happy to work for larger firms. But we do feel a little bit slighted when [the] MBE WBE process targets our core.… It doesn’t matter how good we are, how fast we are, how efficient we are, all of a sudden we, from my perspective, then we’ve become the victim.

- When the big boys come to town for the big contracts that’s got the experience, they won’t even talk to me because they’ve got a 15 percent MBE, WBE [goal] and if they’re going to give up anything [my type of work is] where they’re going to give it up.

Several general contractors deemed contracting affirmative action programs in general to be mostly ineffective.

- You’re really not building capacity.… We’re going to charge two percent to push this equipment through to this subcontractor. They’re getting a little fee.

- [Lambert Airport] introduced a 40 percent minority goal and it was either fraud or get out. So we got out.… There was nobody of a capacity in St. Louis to joint venture with on a project that size. We see the state doing the same thing today … I’m from the ‘60s, so I deal with it. I believe in helping people out and all that. But I don’t believe in ridiculousness, I mean because you get to the point where it’s just non-workable and consequently you try to avoid any governmental work as much as possible.

- Our construction consumers– which are our owners– look to us to try to solve the issue of minority participation… And maybe we’re the wrong people to solve the problem. If it’s been 50 years, 40 years, 30 years, and we have no successes or very few successes, are we the right persons to really solve the problem?

- We’ve been [setting goals] for 40 years in my industry and we have one MBE who bought out a large non-union white firm that’s now minority. We have one MBE who was a professional engineer who worked for [a firm] for years and is very qualified.… I was sweeping floors in the warehouse before I got anywhere, with my parents. And we’re not giving people the mentoring chance to develop into contractors, we’re just saying, boom, we got 20 percent or 10 percent. You’re our guy. And he or she may not be prepared. In most cases, they aren’t. Because after 40 years, we don’t have anything to show for it.

- I know that there’s racism. That’s a given. But I don’t think in southwest Missouri [as a White male] I’ve not had that big of a problem ever with that kind of issue. Being Catholic, I’ve had people that wouldn’t work for me and have quit because I’m Catholic.… I don’t see color, one, you know, and so I don't see sex either. If you're the low price or you're the most qualified then I go with you.

A few general contractors stated that M/WBEs do not want to work on private sector or no-goals projects despite being actively solicited.

- A lot of the M[BE]s and W[BE]s only want to participate on [contracts] where there is requirements. So we solicit M[BE]s and W[BE]s all the time for all types of work and we're primarily private. We can't get them to come out and bid any of that work.… Because they think that you have to hire them for the public work.… They think you have to accept their bid at any level.

- You even go so far as to make phone calls and try to get them to bid more work on the private side and they just don't want to do it.

11. Contract Performance Monitoring and Enforcement

More monitoring of actual utilization of subcontractors was needed, according to many M/WBEs and state staff persons.

- Prove to us that you're getting minority subcontractors on this project. They're not doing that.

- There have been bids awarded with one minority subcontractor and once they secured the award they replace and the state does nothing when those companies are replaced. And they may be replaced with a non-minority company.

- My firm has been named on numerous proposals where you're listed in the proposal, they use you to get the work and then when it comes time then they compete the work or somehow do it themselves. So, that I would say over our twenty years it's happened, I daresay frequently.

- They put them on the bid and they're not utilizing them.

While a prime vendor is permitted to substitute a non-performing M/WBE after contract award, several primes reported that they rarely seek approval.

- They're not held accountable.… I have to go look for another MBE and as difficult as it was in the beginning, how am I going to get that done and meet my project deadline?

- Don't allow the MBE contractor to come to the non-MBE contractor to do his work after the fact.

D. Conclusion

The M/WBE 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 augmenting program staff; increasing access to information about state procurement processes and upcoming opportunities; additional networking, outreach and matchmaking efforts; reviewing contract sizes and specifications to reduce barriers to the participation of small firms; working with other entities to provide technical assistance and supportive services to M/WBEs and other small firms; quick pay; adopting a small business setaside component; standardizing the program's implementation across state agencies; providing training to vendors and state staff on the program; gathering information on the costs of all subcontractor bids to ensure competitiveness and non-discrimination; and monitoring contract performance and compliance with contractual commitments.

IV. UTILIZATION, AVAILABILITY AND DISPARITIES FOR THE STATE OF MISSOURI

A. Contract Data Sources and Sampling Method

The Study analyzed contract data for state fiscal years 2008 through 2013 for the State of Missouri. The initial contract data file included records from 10 state agencies:

- Office of Administration's Division of Purchasing and Materials Management ("DPMM")
- Office of Administration's Division of Facilities Management, Design and Construction ("FMDC")
- Department of Agriculture
- Department of Conservation
- Department of Economic Development
- Department of Elementary and Secondary Education
- Department of Natural Resources
- Department of Public Safety
- Department of Transportation
- Missouri Lottery

The data from DPMM included records for a total of 16 agencies.[117] The data from FMDC included records for a total of 10 agencies.[118] In total, we received records for 7,190 contracts. Of these, 1,333 were eliminated because there were

[117] Department of Economic Development; Department of Elementary and Secondary Education; Department of Higher Education; Department of Health and Senior Services; Department of Insurance, Financial Institutions and Professional Registration; Department of Mental Health; Department of Natural Resources; Department of Corrections; Department of Labor and Industrial Relations; Department of Revenue; Department of Public Safety; Department of Social Services; Department of Agriculture; Department of Conservation; Department of Transportation; and Office of Administration.

[118] Department of Elementary and Secondary Education; Department of Mental Health; Department of Natural Resources; Department of Corrections; Department of Labor and Industrial Relations; Department of Revenue; Department of Public Safety; Department of Social Services; Department of Agriculture; and Office of Administration.

cancelled contracts, contracts with other governments, duplicate records, etc. From the remaining 5,857 contracts, we identified 1,159 contracts with a total award amount of $42,816,386 that were between $25,000 and $50,000, and therefore had very little likelihood of subcontracting opportunities. These contracts are included in the final file. For the remaining 4,698 large contracts, we identified a representative sample of 494 contracts with a total award amount of $4,008,726,377 from which to collect prime and subcontract level contract data. We were able to collect approximately 83 percent of the dollars in the Final Contract File sample file. The Final Contract File was used to determine the product and geographic market area for the Study; to estimate the utilization of M/WBEs on those contracts; and to calculate M/WBE availability in the state's marketplace.

B. The State's Product and Geographic Markets

1. Missouri'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,[119] that make up at least 75 percent of the prime contract and subcontract payments for the Study period.[120] However, for this Study, we went further, and applied a "90/90/90" rule, whereby we analyzed NAICS codes that cover over 90 percent of the total contract dollars; over 90 percent of the prime contract dollars; and over 90 percent of the subcontract dollars. We took this approach so that we could be assured that we provide an in depth picture of the state's activities.

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

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[119] www.census.gov/eos/www/naics.

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

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

NAICS	NAICS Code Description	NAICS PCT	PCT TOTAL DOLLARS
524114	Direct Health and Medical Insurance Carriers	26.2%	26.2%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	8.4%	34.6%
541618	Other Management Consulting Services	7.8%	42.4%
541512	Computer Systems Design Services	6.0%	48.4%
541219	Other Accounting Services	4.8%	53.2%
446110	Pharmacies and Drug Stores	4.7%	58.0%
621420	Outpatient Mental Health and Substance Abuse Centers	4.4%	62.4%
813212	Voluntary Health Organizations	2.4%	64.8%
623990	Other Residential Care Facilities	2.1%	67.0%
522120	Savings Institutions	2.1%	69.1%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	2.1%	71.1%
424410	General Line Grocery Merchant Wholesalers	1.9%	73.1%
541611	Administrative Management and General Management Consulting Services	1.9%	74.9%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	1.6%	76.6%
522220	Sales Financing	1.4%	78.0%
518210	Data Processing, Hosting, and Related Services	1.3%	79.3%
541511	Custom Computer Programming Services	1.3%	80.6%
522298	All Other Nondepository Credit Intermediation	1.2%	81.9%
441110	New Car Dealers	1.1%	83.0%
561422	Telemarketing Bureaus and Other Contact Centers	0.9%	83.9%
485410	School and Employee Bus Transportation	0.9%	84.8%
236220	Commercial and Institutional Building Construction	0.8%	85.6%
621210	Offices of Dentists	0.8%	86.4%
624310	Vocational Rehabilitation Services	0.8%	87.1%
524292	Third Party Administration of Insurance and Pension Funds	0.8%	87.9%
541330	Engineering Services	0.6%	88.5%
238220	Plumbing, Heating, and Air-Conditioning Contractors	0.6%	89.2%
541810	Advertising Agencies	0.6%	89.7%
541110	Offices of Lawyers	0.5%	90.2%
238910	Site Preparation Contractors	0.5%	90.7%

Source: CHA analysis of Missouri agency data

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

NAICS	NAICS Code Description	NAICS PCT	PCT TOTAL DOLLARS
524114	Direct Health and Medical Insurance Carriers	30.5%	30.5%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	9.7%	40.3%
541618	Other Management Consulting Services	7.5%	47.7%
541219	Other Accounting Services	5.6%	53.4%
541512	Computer Systems Design Services	5.3%	58.7%
621420	Outpatient Mental Health and Substance Abuse Centers	5.2%	63.8%
813212	Voluntary Health Organizations	2.8%	66.7%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	2.4%	69.1%
522120	Savings Institutions	2.3%	71.4%
424410	General Line Grocery Merchant Wholesalers	2.3%	73.7%
623990	Other Residential Care Facilities	2.1%	75.8%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	1.9%	77.7%
541611	Administrative Management and General Management Consulting Services	1.9%	79.6%
522220	Sales Financing	1.7%	81.2%
446110	Pharmacies and Drug Stores	1.6%	82.9%
522298	All Other Nondepository Credit Intermediation	1.4%	84.3%
441110	New Car Dealers	1.3%	85.6%
518210	Data Processing, Hosting, and Related Services	1.2%	86.8%
485410	School and Employee Bus Transportation	1.0%	87.8%
624310	Vocational Rehabilitation Services	0.9%	88.7%
524292	Third Party Administration of Insurance and Pension Funds	0.9%	89.6%
236220	Commercial and Institutional Building Construction	0.7%	90.3%
813212	Voluntary Health Organizations	2.8%	66.7%
238910	Site Preparation Contractors	0.5%	90.7%

Source: CHA analysis of Missouri agency data

Table 3: Industry Percentage Distribution of Sub Contracts by Dollars Paid

NAICS	NAICS Code Description	NAICS PCT	PCT TOTAL DOLLARS
446110	Pharmacies and Drug Stores	23.4%	23.4%
541512	Computer Systems Design Services	10.4%	33.8%
541618	Other Management Consulting Services	9.8%	43.6%
541511	Custom Computer Programming Services	9.1%	52.7%
561422	Telemarketing Bureaus and Other Contact Centers	6.6%	59.3%
621210	Offices of Dentists	5.5%	64.7%
238220	Plumbing, Heating, and Air-Conditioning Contractors	3.5%	68.2%
238210	Electrical Contractors and Other Wiring Installation Contractors	2.4%	70.6%
623990	Other Residential Care Facilities	2.2%	72.8%
238160	Roofing Contractors	2.0%	74.7%
624410	Child Day Care Services	1.9%	76.6%
541611	Administrative Management and General Management Consulting Services	1.8%	78.5%
518210	Data Processing, Hosting, and Related Services	1.7%	80.2%
541330	Engineering Services	1.6%	81.7%
236220	Commercial and Institutional Building Construction	1.5%	83.2%
561499	All Other Business Support Services	1.4%	84.6%
238110	Poured Concrete Foundation and Structure Contractors	1.3%	85.9%
332312	Fabricated Structural Metal Manufacturing	1.2%	87.1%
522120	Savings Institutions	1.0%	88.0%
238140	Masonry Contractors	0.9%	89.0%
238910	Site Preparation Contractors	0.9%	89.9%
541810	Advertising Agencies	0.9%	90.7%

Source: CHA analysis of Missouri agency data

2. Missouri's Geographic Market

The courts require that a state government limit the reach of its race- and gender-conscious contracting program for contracts it funds to its market area.[121]

[121] *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 508 (1989) (Richmond was specifically faulted for including minority contractors from across the country in its program based on the national evidence that supported the USDOT DBE program).

While it may be that the state's jurisdictional borders comprise its market area, this element of the analysis must also be empirically established.[122] To determine the relevant geographic market area, we applied the rule of thumb of identifying the firm locations that account for at least 75 percent of contract and subcontract dollar payments in the contract data file.[123] Location was determined by ZIP code as listed in the file and aggregated into counties as the geographic unit.

As presented in Table 4, spending in Missouri accounted for 77.1% of all contract dollars paid in the product market. Therefore, Missouri constituted the geographic market area from which we drew our availability data. Table 5 presents those 10 Missouri counties that account for 98.9% percent of the total spending in the product market in the state.

Table 4: Geographic Percentage Distribution of Contracts

STATE	Pct Total Contract Dollars	STATE	Pct Total Contract Dollars	STATE	Pct Total Contract Dollars
MO	77.12%	MS	0.50%	TX	0.02%
MD	2.92%	VA	0.42%	ID	0.02%
IL	2.87%	CT	0.27%	DE	0.01%
MA	2.48%	MN	0.18%	WA	0.01%
UT	2.14%	KY	0.09%	PA	0.01%
CA	1.98%	NJ	0.07%	NV	0.00%
LA	1.79%	GA	0.05%	OK	0.00%
IN	1.69%	NC	0.05%	AL	0.00%
NY	1.53%	TN	0.04%	NE	0.00%
FL	1.33%	MI	0.04%	DC	0.00%
OH	0.85%	AZ	0.04%	ND	0.00%
KS	0.82%	CO	0.03%	TOTAL	100.00%
WI	0.62%	AR	0.02%		

Source: CHA analysis of Missouri agency data.

[122] *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10th Cir. 1994) (to confine data to strict geographic boundaries would ignore "economic reality").

[123] National Disparity Study Guidelines, p. 49.

Table 5: Geographic Percentage Distribution of Contracts

COUNTY	COUNTY PCT	PCT TOTAL
St. Louis	54.6%	54.6%
Cole	33.3%	87.9%
St. Louis City	3.8%	91.7%
Jackson	2.9%	94.6%
Boone	2.7%	97.3%
Greene	0.5%	97.8%
Platte	0.4%	98.2%
Phelps	0.4%	98.6%
Buchanan	0.1%	98.8%
Clay	0.1%	98.9%

Source: CHA analysis of Missouri agency data.

C. Missouri's Utilization of M/WBEs in Its Market Areas

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

We then determined the distribution of contracts and contract dollars by NAICS codes. While the state's contract files sometimes provided information on whether a MBE and/or WBE was set on the contract, a large portion did not and therefore we could not perform an analysis of the outcomes of contracts with goals compared to contracts without goals.

Table 6: NAICS Code Distribution of Contract Dollars

NAICS	NAICS Code Description	Total Contract Dollars	Pct Total Contract Dollars
524114	Direct Health and Medical Insurance Carriers	$873,292,863.92	36.7%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	$276,595,678.56	11.6%

541618	Other Management Consulting Services	$163,712,111.55	6.9%
541219	Other Accounting Services	$161,473,333.00	6.8%
541512	Computer Systems Design Services	$160,447,668.15	6.7%
621420	Outpatient Mental Health and Substance Abuse Centers	$147,293,468.00	6.2%
623990	Other Residential Care Facilities	$70,898,060.89	3.0%
424410	General Line Grocery Merchant Wholesalers	$64,725,920.82	2.7%
522220	Sales Financing	$47,789,632.00	2.0%
518210	Data Processing, Hosting, and Related Services	$43,909,446.96	1.8%
446110	Pharmacies and Drug Stores	$42,513,906.01	1.8%
541511	Custom Computer Programming Services	$41,939,530.02	1.8%
441110	New Car Dealers	$36,549,784.76	1.5%
561422	Telemarketing Bureaus and Other Contact Centers	$30,151,506.36	1.3%
485410	School and Employee Bus Transportation	$28,523,553.75	1.2%
236220	Commercial and Institutional Building Construction	$26,195,723.29	1.1%
621210	Offices of Dentists	$25,910,590.00	1.1%
624310	Vocational Rehabilitation Services	$25,285,468.32	1.1%
238220	Plumbing, Heating, and Air-Conditioning Contractors	$20,594,684.27	0.9%
541810	Advertising Agencies	$18,893,938.51	0.8%
238910	Site Preparation Contractors	$14,586,085.96	0.6%
238210	Electrical Contractors and Other Wiring Installation Contractors	$12,673,983.43	0.5%
624410	Child Day Care Services	$9,069,633.00	0.4%
238160	Roofing Contractors	$7,600,395.27	0.3%
561499	All Other Business Support Services	$6,496,611.17	0.3%
332312	Fabricated Structural Metal Manufacturing	$5,670,645.87	0.2%
522120	Savings Institutions	$4,544,445.00	0.2%
541330	Engineering Services	$4,216,525.87	0.2%
238140	Masonry Contractors	$4,210,533.97	0.2%
238110	Poured Concrete Foundation and Structure Contractors	$4,097,109.93	0.2%
524292	Third Party Administration of Insurance and Pension Funds	$919,101.62	0.0%

541611	Administrative Management and General Management Consulting Services	$264,340.31	0.0%
541110	Offices of Lawyers	$90,577.58	0.0%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	$36,358.45	0.0%
TOTAL		$2,381,173,216.57	100.0%

Source: CHA analysis of Missouri agency data.

Table 7a: Distribution of Contract Dollars by Race and Gender

NAICS	Asian	Black	Hispanic	Native American	White Women	Non-M/WBE
236220	$0.00	$0.00	$0.00	$160,402.49	$5,893,781.76	$20,141,539.04
238110	$0.00	$172,876.00	$0.00	$42,811.68	$1,186,582.25	$2,694,840.00
238140	$0.00	$0.00	$0.00	$62,174.00	$12,700.00	$4,135,659.97
238160	$0.00	$391,744.35	$0.00	$0.00	$1,205,318.50	$6,003,332.42
238210	$0.00	$32,000.00	$217,630.00	$3,601,337.25	$1,250,852.16	$7,572,164.03
238220	$0.00	$0.00	$37,528.00	$0.00	$318,616.00	$20,238,540.27
238910	$0.00	$0.00	$0.00	$82,781.00	$347,439.23	$14,155,865.73
332312	$0.00	$0.00	$0.00	$0.00	$276,856.00	$5,393,789.87
423430	$0.00	$276,595,678.56	$0.00	$0.00	$0.00	$0.00
424210	$0.00	$0.00	$0.00	$0.00	$0.00	$36,358.45
424410	$0.00	$0.00	$0.00	$0.00	$82,921.41	$64,642,999.41
441110	$0.00	$0.00	$0.00	$0.00	$0.00	$36,549,784.76
446110	$0.00	$21,467,280.00	$0.00	$0.00	$0.00	$21,046,626.01
485410	$0.00	$0.00	$0.00	$0.00	$0.00	$28,523,553.75
518210	$0.00	$0.00	$0.00	$0.00	$0.00	$43,909,446.96
522120	$0.00	$0.00	$0.00	$0.00	$0.00	$4,544,445.00
522220	$0.00	$0.00	$0.00	$0.00	$0.00	$47,789,632.00
524114	$0.00	$0.00	$0.00	$0.00	$39,763.00	$873,253,100.92
524292	$0.00	$0.00	$919,101.62	$0.00	$0.00	$0.00
541110	$0.00	$0.00	$0.00	$0.00	$0.00	$90,577.58
541219	$0.00	$0.00	$0.00	$0.00	$0.00	$161,473,333.00
541330	$0.00	$229,249.08	$334,555.00	$0.00	$176,059.75	$3,476,662.04
541511	$22,689,688.00	$0.00	$0.00	$0.00	$618,409.02	$18,631,433.00
541512	$84,813,376.12	$4,090,671.00	$39,925.00	$0.00	$27,254,916.29	$44,248,779.73
541611	$0.00	$0.00	$0.00	$0.00	$0.00	$264,340.31
541618	$808,058.25	$37,810.00	$0.00	$0.00	$30,118,308.47	$132,747,934.83
541810	$0.00	$682,409.50	$21,457.00	$0.00	$2,861,690.83	$15,328,381.18
561422	$0.00	$19,742,695.86	$0.00	$0.00	$0.00	$10,408,810.50
561499	$0.00	$6,101,817.25	$0.00	$0.00	$141,619.27	$253,174.65
621210	$0.00	$25,910,590.00	$0.00	$0.00	$0.00	$0.00
621420	$0.00	$0.00	$0.00	$0.00	$0.00	$147,293,468.00
623990	$0.00	$0.00	$0.00	$0.00	$0.00	$70,898,060.89
624310	$0.00	$0.00	$0.00	$0.00	$0.00	$25,285,468.32
624410	$0.00	$0.00	$0.00	$0.00	$0.00	$9,069,633.00
TOTAL	**$108,311,122.37**	**$355,454,821.60**	**$1,570,196.62**	**$3,949,506.42**	**$71,785,833.94**	**$1,840,101,735.62**

Table 7b: Distribution of Contract Dollars by Race and Gender

NAICS	MBE	WBE	M/WBE	Non-M/WBE	TOTAL
236220	$160,402.49	$5,893,781.76	$6,054,184.25	$20,141,539.04	$26,195,723.29
238110	$215,687.68	$1,186,582.25	$1,402,269.93	$2,694,840.00	$4,097,109.93
238140	$62,174.00	$12,700.00	$74,874.00	$4,135,659.97	$4,210,533.97
238160	$391,744.35	$1,205,318.50	$1,597,062.85	$6,003,332.42	$7,600,395.27
238210	$3,850,967.25	$1,250,852.16	$5,101,819.41	$7,572,164.03	$12,673,983.44
238220	$37,528.00	$318,616.00	$356,144.00	$20,238,540.27	$20,594,684.27
238910	$82,781.00	$347,439.23	$430,220.23	$14,155,865.73	$14,586,085.96
332312	$0.00	$276,856.00	$276,856.00	$5,393,789.87	$5,670,645.87
423430	$276,595,678.56	$0.00	$276,595,678.56	$0.00	$276,595,678.56
424210	$0.00	$0.00	$0.00	$36,358.45	$36,358.45
424410	$0.00	$82,921.41	$82,921.41	$64,642,999.41	$64,725,920.82
441110	$0.00	$0.00	$0.00	$36,549,784.76	$36,549,784.76
446110	$21,467,280.00	$0.00	$21,467,280.00	$21,046,626.01	$42,513,906.01
485410	$0.00	$0.00	$0.00	$28,523,553.75	$28,523,553.75
518210	$0.00	$0.00	$0.00	$43,909,446.96	$43,909,446.96
522120	$0.00	$0.00	$0.00	$4,544,445.00	$4,544,445.00
522220	$0.00	$0.00	$0.00	$47,789,632.00	$47,789,632.00
524114	$0.00	$39,763.00	$39,763.00	$873,253,100.92	$873,292,863.92
524292	$919,101.62	$0.00	$919,101.62	$0.00	$919,101.62
541110	$0.00	$0.00	$0.00	$90,577.58	$90,577.58
541219	$0.00	$0.00	$0.00	$161,473,333.00	$161,473,333.00
541330	$563,804.08	$176,059.75	$739,863.83	$3,476,662.04	$4,216,525.87
541511	$22,689,688.00	$618,409.02	$23,308,097.02	$18,631,433.00	$41,939,530.02
541512	$88,943,972.12	$27,254,916.29	$116,198,888.41	$44,248,779.73	$160,447,668.14
541611	$0.00	$0.00	$0.00	$264,340.31	$264,340.31
541618	$845,868.25	$30,118,308.47	$30,964,176.72	$132,747,934.83	$163,712,111.55
541810	$703,866.50	$2,861,690.83	$3,565,557.33	$15,328,381.18	$18,893,938.51
561422	$19,742,695.86	$0.00	$19,742,695.86	$10,408,810.50	$30,151,506.36
561499	$6,101,817.25	$141,619.27	$6,243,436.52	$253,174.65	$6,496,611.17
621210	$25,910,590.00	$0.00	$25,910,590.00	$0.00	$25,910,590.00
621420	$0.00	$0.00	$0.00	$147,293,468.00	$147,293,468.00
623990	$0.00	$0.00	$0.00	$70,898,060.89	$70,898,060.89
624310	$0.00	$0.00	$0.00	$25,285,468.32	$25,285,468.32
624410	$0.00	$0.00	$0.00	$9,069,633.00	$9,069,633.00
TOTAL	**$469,285,647.01**	**$71,785,833.94**	**$541,071,480.95**	**$1,840,101,735.62**	**$2,381,173,216.57**

Source: CHA analysis of Missouri agency data.

Table 8a: Percent Distribution of Contract Dollars by Race and Gender

NAICS	Asian	Black	Hispanic	Native American	White Women	Non-M/WBE
236220	0.0%	0.0%	0.0%	0.6%	22.5%	76.9%
238110	0.0%	4.2%	0.0%	1.0%	29.0%	65.8%
238140	0.0%	0.0%	0.0%	1.5%	0.3%	98.2%
238160	0.0%	5.2%	0.0%	0.0%	15.9%	79.0%
238210	0.0%	0.3%	1.7%	28.4%	9.9%	59.7%
238220	0.0%	0.0%	0.2%	0.0%	1.5%	98.3%
238910	0.0%	0.0%	0.0%	0.6%	2.4%	97.1%
332312	0.0%	0.0%	0.0%	0.0%	4.9%	95.1%
423430	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
424210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
424410	0.0%	0.0%	0.0%	0.0%	0.1%	99.9%
441110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
446110	0.0%	50.5%	0.0%	0.0%	0.0%	49.5%
485410	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
522120	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
522220	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
524114	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
524292	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
541110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541219	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541330	0.0%	5.4%	7.9%	0.0%	4.2%	82.5%
541511	54.1%	0.0%	0.0%	0.0%	1.5%	44.4%
541512	52.9%	2.5%	0.0%	0.0%	17.0%	27.6%
541611	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541618	0.5%	0.0%	0.0%	0.0%	18.4%	81.1%
541810	0.0%	3.6%	0.1%	0.0%	15.1%	81.1%
561422	0.0%	65.5%	0.0%	0.0%	0.0%	34.5%
561499	0.0%	93.9%	0.0%	0.0%	2.2%	3.9%
621210	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
621420	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
623990	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
624310	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
624410	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
TOTAL	**4.5%**	**14.9%**	**0.1%**	**0.2%**	**3.0%**	**77.3%**

Source: CHA analysis of Missouri agency data.

Table 8b: Percent Distribution of Contract Dollars by Race and Gender

NAICS	MBE	WBE	M/WBE	Non-M/WBE	TOTAL
236220	0.6%	22.5%	23.1%	76.9%	100.0%
238110	5.3%	29.0%	34.2%	65.8%	100.0%
238140	1.5%	0.3%	1.8%	98.2%	100.0%
238160	5.2%	15.9%	21.0%	79.0%	100.0%
238210	30.4%	9.9%	40.3%	59.7%	100.0%
238220	0.2%	1.5%	1.7%	98.3%	100.0%
238910	0.6%	2.4%	2.9%	97.1%	100.0%
332312	0.0%	4.9%	4.9%	95.1%	100.0%
423430	100.0%	0.0%	100.0%	0.0%	100.0%
424210	0.0%	0.0%	0.0%	100.0%	100.0%
424410	0.0%	0.1%	0.1%	99.9%	100.0%
441110	0.0%	0.0%	0.0%	100.0%	100.0%
446110	50.5%	0.0%	50.5%	49.5%	100.0%
485410	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	100.0%	100.0%
522120	0.0%	0.0%	0.0%	100.0%	100.0%
522220	0.0%	0.0%	0.0%	100.0%	100.0%
524114	0.0%	0.0%	0.0%	100.0%	100.0%
524292	100.0%	0.0%	100.0%	0.0%	100.0%
541110	0.0%	0.0%	0.0%	100.0%	100.0%
541219	0.0%	0.0%	0.0%	100.0%	100.0%
541330	13.4%	4.2%	17.5%	82.5%	100.0%
541511	54.1%	1.5%	55.6%	44.4%	100.0%
541512	55.4%	17.0%	72.4%	27.6%	100.0%
541611	0.0%	0.0%	0.0%	100.0%	100.0%
541618	0.5%	18.4%	18.9%	81.1%	100.0%
541810	3.7%	15.1%	18.9%	81.1%	100.0%
561422	65.5%	0.0%	65.5%	34.5%	100.0%
561499	93.9%	2.2%	96.1%	3.9%	100.0%
621210	100.0%	0.0%	100.0%	0.0%	100.0%
621420	0.0%	0.0%	0.0%	100.0%	100.0%
623990	0.0%	0.0%	0.0%	100.0%	100.0%
624310	0.0%	0.0%	0.0%	100.0%	100.0%
624410	0.0%	0.0%	0.0%	100.0%	100.0%
TOTAL	**19.7%**	**3.0%**	**22.7%**	**77.3%**	**100.0%**

Source: CHA analysis of Missouri agency data.

In examining the data, we discovered that one firm received almost all the dollars in NAICS code 423430, Computer and Computer Peripheral Equipment and Software Merchant Wholesalers, and that this firm is Black-owned. This extreme anomaly obscured the utilization and experiences of the overall M/WBEs community, and so Tables 9a through 10b presents results without this code.

Table 9a: Distribution of Contract Dollars by Race and Gender without NAICS Code 423430

NAICS	Asian	Black	Hispanic	Native American	White Women	Non-M/WBE
236220	$0.00	$0.00	$0.00	$160,402.49	$5,893,781.76	$20,141,539.04
238110	$0.00	$172,876.00	$0.00	$42,811.68	$1,186,582.25	$2,694,840.00
238140	$0.00	$0.00	$0.00	$62,174.00	$12,700.00	$4,135,659.97
238160	$0.00	$391,744.35	$0.00	$0.00	$1,205,318.50	$6,003,332.42
238210	$0.00	$32,000.00	$217,630.00	$3,601,337.25	$1,250,852.16	$7,572,164.03
238220	$0.00	$0.00	$37,528.00	$0.00	$318,616.00	$20,238,540.27
238910	$0.00	$0.00	$0.00	$82,781.00	$347,439.23	$14,155,865.73
332312	$0.00	$0.00	$0.00	$0.00	$276,856.00	$5,393,789.87
424210	$0.00	$0.00	$0.00	$0.00	$0.00	$36,358.45
424410	$0.00	$0.00	$0.00	$0.00	$82,921.41	$64,642,999.41
441110	$0.00	$0.00	$0.00	$0.00	$0.00	$36,549,784.76
446110	$0.00	$21,467,280.00	$0.00	$0.00	$0.00	$21,046,626.01
485410	$0.00	$0.00	$0.00	$0.00	$0.00	$28,523,553.75
518210	$0.00	$0.00	$0.00	$0.00	$0.00	$43,909,446.96
522120	$0.00	$0.00	$0.00	$0.00	$0.00	$4,544,445.00
522220	$0.00	$0.00	$0.00	$0.00	$0.00	$47,789,632.00
524114	$0.00	$0.00	$0.00	$0.00	$39,763.00	$873,253,100.92
524292	$0.00	$0.00	$919,101.62	$0.00	$0.00	$0.00
541110	$0.00	$0.00	$0.00	$0.00	$0.00	$90,577.58
541219	$0.00	$0.00	$0.00	$0.00	$0.00	$161,473,333.00
541330	$0.00	$229,249.08	$334,555.00	$0.00	$176,059.75	$3,476,662.04
541511	$22,689,688.00	$0.00	$0.00	$0.00	$618,409.02	$18,631,433.00
541512	$84,813,376.12	$4,090,671.00	$39,925.00	$0.00	$27,254,916.29	$44,248,779.73
541611	$0.00	$0.00	$0.00	$0.00	$0.00	$264,340.31
541618	$808,058.25	$37,810.00	$0.00	$0.00	$30,118,308.47	$132,747,934.83
541810	$0.00	$682,409.50	$21,457.00	$0.00	$2,861,690.83	$15,328,381.18
561422	$0.00	$19,742,695.86	$0.00	$0.00	$0.00	$10,408,810.50
561499	$0.00	$6,101,817.25	$0.00	$0.00	$141,619.27	$253,174.65
621210	$0.00	$25,910,590.00	$0.00	$0.00	$0.00	$0.00
621420	$0.00	$0.00	$0.00	$0.00	$0.00	$147,293,468.00
623990	$0.00	$0.00	$0.00	$0.00	$0.00	$70,898,060.89
624310	$0.00	$0.00	$0.00	$0.00	$0.00	$25,285,468.32
624410	$0.00	$0.00	$0.00	$0.00	$0.00	$9,069,633.00
TOTAL	**$108,311,122.37**	**$78,859,143.04**	**$1,570,196.62**	**$3,949,506.42**	**$71,785,833.94**	**$1,840,101,735.62**

Source: CHA analysis of Missouri agency data.

Table 9b: Distribution of Contract Dollars by Race and Gender without NAICS Code 423430

NAICS	MBE	WBE	M/WBE	Non-M/WBE	TOTAL
236220	$160,402.49	$5,893,781.76	$6,054,184.25	$20,141,539.04	$26,195,723.29
238110	$215,687.68	$1,186,582.25	$1,402,269.93	$2,694,840.00	$4,097,109.93
238140	$62,174.00	$12,700.00	$74,874.00	$4,135,659.97	$4,210,533.97
238160	$391,744.35	$1,205,318.50	$1,597,062.85	$6,003,332.42	$7,600,395.27
238210	$3,850,967.25	$1,250,852.16	$5,101,819.41	$7,572,164.03	$12,673,983.44
238220	$37,528.00	$318,616.00	$356,144.00	$20,238,540.27	$20,594,684.27
238910	$82,781.00	$347,439.23	$430,220.23	$14,155,865.73	$14,586,085.96
332312	$0.00	$276,856.00	$276,856.00	$5,393,789.87	$5,670,645.87
424210	$0.00	$0.00	$0.00	$36,358.45	$36,358.45
424410	$0.00	$82,921.41	$82,921.41	$64,642,999.41	$64,725,920.82
441110	$0.00	$0.00	$0.00	$36,549,784.76	$36,549,784.76
446110	$21,467,280.00	$0.00	$21,467,280.00	$21,046,626.01	$42,513,906.01
485410	$0.00	$0.00	$0.00	$28,523,553.75	$28,523,553.75
518210	$0.00	$0.00	$0.00	$43,909,446.96	$43,909,446.96
522120	$0.00	$0.00	$0.00	$4,544,445.00	$4,544,445.00
522220	$0.00	$0.00	$0.00	$47,789,632.00	$47,789,632.00
524114	$0.00	$39,763.00	$39,763.00	$873,253,100.92	$873,292,863.92
524292	$919,101.62	$0.00	$919,101.62	$0.00	$919,101.62
541110	$0.00	$0.00	$0.00	$90,577.58	$90,577.58
541219	$0.00	$0.00	$0.00	$161,473,333.00	$161,473,333.00
541330	$563,804.08	$176,059.75	$739,863.83	$3,476,662.04	$4,216,525.87
541511	$22,689,688.00	$618,409.02	$23,308,097.02	$18,631,433.00	$41,939,530.02
541512	$88,943,972.12	$27,254,916.29	$116,198,888.41	$44,248,779.73	$160,447,668.14
541611	$0.00	$0.00	$0.00	$264,340.31	$264,340.31
541618	$845,868.25	$30,118,308.47	$30,964,176.72	$132,747,934.83	$163,712,111.55
541810	$703,866.50	$2,861,690.83	$3,565,557.33	$15,328,381.18	$18,893,938.51
561422	$19,742,695.86	$0.00	$19,742,695.86	$10,408,810.50	$30,151,506.36
561499	$6,101,817.25	$141,619.27	$6,243,436.52	$253,174.65	$6,496,611.17
621210	$25,910,590.00	$0.00	$25,910,590.00	$0.00	$25,910,590.00
621420	$0.00	$0.00	$0.00	$147,293,468.00	$147,293,468.00
623990	$0.00	$0.00	$0.00	$70,898,060.89	$70,898,060.89
624310	$0.00	$0.00	$0.00	$25,285,468.32	$25,285,468.32
624410	$0.00	$0.00	$0.00	$9,069,633.00	$9,069,633.00
TOTAL	**$192,689,968.45**	**$71,785,833.94**	**$264,475,802.39**	**$1,840,101,735.62**	**$2,104,577,538.01**

Source: CHA analysis of Missouri agency data.

Table 10a: Percent Distribution of Contract Dollars by Race and Gender without NAICS Code 423430

NAICS	Asian	Black	Hispanic	Native American	White Women	Non-M/WBE
236220	0.0%	0.0%	0.0%	0.6%	22.5%	76.9%
238110	0.0%	4.2%	0.0%	1.0%	29.0%	65.8%
238140	0.0%	0.0%	0.0%	1.5%	0.3%	98.2%
238160	0.0%	5.2%	0.0%	0.0%	15.9%	79.0%
238210	0.0%	0.3%	1.7%	28.4%	9.9%	59.7%
238220	0.0%	0.0%	0.2%	0.0%	1.5%	98.3%
238910	0.0%	0.0%	0.0%	0.6%	2.4%	97.1%
332312	0.0%	0.0%	0.0%	0.0%	4.9%	95.1%
424210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
424410	0.0%	0.0%	0.0%	0.0%	0.1%	99.9%
441110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
446110	0.0%	50.5%	0.0%	0.0%	0.0%	49.5%
485410	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
518210	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
522120	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
522220	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
524114	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
524292	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
541110	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541219	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541330	0.0%	5.4%	7.9%	0.0%	4.2%	82.5%
541511	54.1%	0.0%	0.0%	0.0%	1.5%	44.4%
541512	52.9%	2.5%	0.0%	0.0%	17.0%	27.6%
541611	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
541618	0.5%	0.0%	0.0%	0.0%	18.4%	81.1%
541810	0.0%	3.6%	0.1%	0.0%	15.1%	81.1%
561422	0.0%	65.5%	0.0%	0.0%	0.0%	34.5%
561499	0.0%	93.9%	0.0%	0.0%	2.2%	3.9%
621210	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
621420	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
623990	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
624310	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
624410	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
TOTAL	**5.1%**	**3.7%**	**0.1%**	**0.2%**	**3.4%**	**87.4%**

Source: CHA analysis of Missouri agency data.

Table 10b: Percent Distribution of Contract Dollars by Race and Gender without NAICS Code 423430

NAICS	MBE	WBE	M/WBE	Non-M/WBE	TOTAL
236220	0.6%	22.5%	23.1%	76.9%	100.0%
238110	5.3%	29.0%	34.2%	65.8%	100.0%
238140	1.5%	0.3%	1.8%	98.2%	100.0%
238160	5.2%	15.9%	21.0%	79.0%	100.0%
238210	30.4%	9.9%	40.3%	59.7%	100.0%
238220	0.2%	1.5%	1.7%	98.3%	100.0%
238910	0.6%	2.4%	2.9%	97.1%	100.0%
332312	0.0%	4.9%	4.9%	95.1%	100.0%
424210	0.0%	0.0%	0.0%	100.0%	100.0%
424410	0.0%	0.1%	0.1%	99.9%	100.0%
441110	0.0%	0.0%	0.0%	100.0%	100.0%
446110	50.5%	0.0%	50.5%	49.5%	100.0%
485410	0.0%	0.0%	0.0%	100.0%	100.0%
518210	0.0%	0.0%	0.0%	100.0%	100.0%
522120	0.0%	0.0%	0.0%	100.0%	100.0%
522220	0.0%	0.0%	0.0%	100.0%	100.0%
524114	0.0%	0.0%	0.0%	100.0%	100.0%
524292	100.0%	0.0%	100.0%	0.0%	100.0%
541110	0.0%	0.0%	0.0%	100.0%	100.0%
541219	0.0%	0.0%	0.0%	100.0%	100.0%
541330	13.4%	4.2%	17.5%	82.5%	100.0%
541511	54.1%	1.5%	55.6%	44.4%	100.0%
541512	55.4%	17.0%	72.4%	27.6%	100.0%
541611	0.0%	0.0%	0.0%	100.0%	100.0%
541618	0.5%	18.4%	18.9%	81.1%	100.0%
541810	3.7%	15.1%	18.9%	81.1%	100.0%
561422	65.5%	0.0%	65.5%	34.5%	100.0%
561499	93.9%	2.2%	96.1%	3.9%	100.0%
621210	100.0%	0.0%	100.0%	0.0%	100.0%
621420	0.0%	0.0%	0.0%	100.0%	100.0%
623990	0.0%	0.0%	0.0%	100.0%	100.0%
624310	0.0%	0.0%	0.0%	100.0%	100.0%
624410	0.0%	0.0%	0.0%	100.0%	100.0%
TOTAL	**9.2%**	**3.4%**	**12.6%**	**87.4%**	**100.0%**

Source: CHA analysis of Missouri agency data.

D. The Availability of Minority- and Women-Owned Business Enterprises in the State of Missouri's Markets

1. Methodological Framework

Estimates of the availability of minority- and women-owned firms in Missouri'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 Minority- and Women-Owned Business Enterprises ("M/WBEs") to examine whether M/WBEs receive parity.[124] Availability estimates are also crucial for the state to set overall, annual goals for MBE and WBE participation, and for setting narrowly tailored contract goals.

We applied the "custom census" approach to estimating availability. As recognized by the National Model Disparity Study Guidelines,[125] this methodology is superior to the other methods for at least four reasons.

- First, it provides an internally consistent and rigorous "apples to apples" comparison between firms in the availability numerator and those in the denominator. Other approaches often have different definitions for the firms in the numerator (*e.g.*, certified Disadvantaged Business Enterprises) 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 state. This comports with the remedial nature of the M/WBE program by seeking to bring in businesses that have historically been excluded. A custom census is less likely to be tainted by the effects of past and present discrimination than other methods, such as bidders lists, because it seeks out firms that have not been able to access state 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

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[124] For our analysis, the term "M/WBE" includes firms that are certified by OA, as minority- and woman-owned firms, certified by other agencies such as the Missouri Department of Transportation, and firms that are not certified. As discussed in Chapter II, the inclusion of all M/WBEs 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."*).*

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

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 M/WBEs may be smaller, newer, and otherwise less competitive than non-M/WBEs because of the very discrimination sought to be remedied by race-conscious contracting programs. Racial and gender differences in these "capacity" factors are the *outcomes* of discrimination and it is therefore inappropriate as a matter of economics and statistics to use them as "control" variables in a disparity study.[126]

- Fourth, it has been upheld by every court that has reviewed it. The Tenth Circuit found the custom census approach to be "a more sophisticated method to calculate availability than the earlier studies."[127] Likewise, this method was successful in the defense of the DBE programs for Minnesota DOT[128] and Illinois DOT,[129] as well as the M/WBE construction program for the City of Chicago.[130]

2. Estimation of M/WBE Availability

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

- Created a database of representative, recent, and complete State contracts;
- Identified the State's relevant geographic market by counties;
- Identified the State's relevant product market by 6-digit NAICS codes;
- Counted all businesses in the relevant markets using Dun & Bradstreet/Hoovers databases;

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

[127] *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 966, 981 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003) ("M/WBE construction firms are generally smaller and less experienced *because* of discrimination.… Additionally, we do not read *Croson* to require disparity studies that measure whether construction firms are able to perform a *particular contract*.") (emphasis in the original).

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

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

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

- Identified listed minority-owned and women-owned businesses in the relevant markets; and

- Assigned ownership status to all other firms in the relevant markets.

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/WBE 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 of firm. However, recently Hoovers changed its practice and currently, the data simply identify a firm as being minority-owned.[131] This change required us to revise our approach to determining the racial identify of firms' ownership so as to provide narrowly tailored and accurate analyses concerning possible disparity in an agency's contracting practices.

To provide race detail and improve the accuracy of the race and sex assignments, we created a Master M/WBE Directory that combined the results of an exhaustive search for directories and other lists containing information about minority and women-owned businesses. This included the State of Missouri M/WBE directory, Missouri Department of Transportation DBE directory, St. Louis Minority Business Council, University of Missouri System, Missouri State University, and many others. In total, we contacted 178 organizations for this Study and received 40 directories. The resulting list of minority 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.

All of the directories were keypunched and/or cleaned as necessary regarding firm names, contact information and race and gender. The directories were merged into one master list that eliminated duplicate listings of firms while maintaining all relevant information for each firm. The initial merged list contained

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

31,850 firms; however, there are significant duplications of records. Additionally, the contract data we used to identify the relevant geographic and product markets appropriate for the State of Missouri analyses. Due to these conditions, the final master MWBE list was significantly smaller after it is fully prepared for the analyses.

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

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

1. Hoovers data base (basic counts in original)

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

2. Master Directory (basic count in original)

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

3. Master Directory (percentages)

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

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

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

Source: CHA analysis of Missouri agency data.

An important element to determining availability is to properly assign a race and gender label to each firm owner. As discussed above, we took the answers that Hoovers provides to two broad questions ("Is the firm minority-owned" and "Is the firm female-owned") and disaggregated the responses to the "minority owned" question into specific racial categories. However, another concern is that firm ownership has been racially misclassified. There can be three sources of the misclassification: 1. A firm that has been classified as non-M/WBE owned is actually M/WBE owned. 2. A firm that has been classified as M/WBE owned is actually non-M/WBE owned. 3. A firm that has been classified as a particular type of M/WBE firm (*e.g.*, Black) is actually another type of M/WBE firm (*e.g.*, Hispanic.

The best way to address these potential sources of misclassification is through a telephone survey of a stratified random sample of firms. Because this survey had been recently performed for the Missouri Department of Transportation's 2012 Disparity Study in which Ms. Holt participated, this report used the MoDOT Study results to correct for any misclassification.[132]

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

Table 11: Unweighted Availability

NAICS	Black	Hispanic	Asian	Native American		MBE	WBE	Non-M/WBE	Total
236220	9.14%	1.54%	1.27%	1.07%		13.01%	11.09%	75.89%	100.00%
238110	7.36%	1.39%	1.06%	0.93%		10.73%	10.73%	78.54%	100.00%
238140	7.48%	1.40%	1.08%	0.94%		10.90%	10.65%	78.45%	100.00%
238160	7.42%	1.40%	1.07%	0.93%		10.83%	9.85%	79.32%	100.00%
238210	8.66%	1.54%	1.22%	1.05%		12.48%	11.28%	76.24%	100.00%
238220	7.43%	1.40%	1.07%	0.93%		10.83%	10.51%	78.66%	100.00%
238910	7.57%	1.40%	1.09%	0.94%		11.00%	12.40%	76.60%	100.00%
332312	4.95%	0.87%	0.70%	0.59%		7.12%	12.14%	80.74%	100.00%

[132] *The State of Minority- and Women-Owned Business Enterprise: Evidence from Missouri, prepared for the Missouri Department of Transportation, 2012*, NERA Economic Consulting, § IV.C.3.b.

424210	5.52%	0.90%	0.76%	0.63%		7.80%	10.55%	81.65%	100.00%
424410	4.63%	0.79%	0.64%	0.54%		6.60%	9.00%	84.40%	100.00%
441110	4.66%	0.90%	0.68%	0.59%		6.83%	6.63%	86.53%	100.00%
446110	4.52%	0.87%	0.66%	0.58%		6.63%	9.34%	84.03%	100.00%
485410	6.75%	1.23%	0.96%	0.83%		9.77%	6.04%	84.18%	100.00%
518210	6.62%	1.17%	0.93%	0.80%		9.53%	13.73%	76.74%	100.00%
522120	5.05%	1.00%	0.74%	0.66%		7.46%	7.82%	84.72%	100.00%
522220	6.30%	1.15%	0.90%	0.78%		9.12%	9.19%	81.69%	100.00%
524114	5.77%	1.09%	0.83%	0.73%		8.42%	8.85%	82.72%	100.00%
524292	8.62%	1.45%	1.19%	1.00%		12.27%	5.69%	82.03%	100.00%
541110	6.04%	1.16%	0.88%	0.77%		8.85%	10.02%	81.13%	100.00%
541219	5.98%	1.11%	0.86%	0.74%		8.68%	19.89%	71.43%	100.00%
541330	8.99%	1.52%	1.25%	1.05%		12.81%	10.33%	76.87%	100.00%
541511	7.63%	1.35%	1.08%	0.92%		10.97%	11.71%	77.31%	100.00%
541512	10.07%	1.65%	1.38%	1.15%		14.25%	11.47%	74.28%	100.00%
541611	8.04%	1.39%	1.12%	0.95%		11.50%	13.65%	74.84%	100.00%
541618	6.72%	1.24%	0.96%	0.83%		9.76%	9.93%	80.31%	100.00%
541810	6.28%	1.15%	0.90%	0.77%		9.10%	18.37%	72.53%	100.00%
561422	5.83%	1.16%	0.86%	0.76%		8.61%	18.77%	72.61%	100.00%
561499	7.10%	1.35%	1.03%	0.90%		10.39%	10.98%	78.63%	100.00%
621210	5.40%	1.04%	0.79%	0.69%		7.92%	8.69%	83.39%	100.00%
621420	5.44%	1.04%	0.79%	0.69%		7.96%	9.57%	82.46%	100.00%
623990	5.24%	1.03%	0.77%	0.68%		7.71%	6.78%	85.50%	100.00%
624310	5.31%	1.04%	0.78%	0.69%		7.82%	6.44%	85.74%	100.00%
624410	6.06%	1.05%	0.85%	0.72%		8.68%	26.80%	64.53%	100.00%
Total	6.91%	1.26%	0.99%	0.85%		10.01%	11.80%	78.19%	100.00%

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 state's spending patterns as reflected in the dollars spent in each code.

The final estimates in Table 12 are the weighted averages of all the individual 6-digit level availability estimates in Missouri's market area, with the weights being the percentage share of dollars spent.

Table 12: Aggregated Weighted Availability

Black	Hispanic	Asian	Native American		MBE	WBE	Non-M/WBE
6.23%	1.15%	0.89%	0.77%		9.03%	10.40%	80.18%

E. Analysis of Race and Gender Disparities in the State of Missouri's Utilization of Minority- and Women-Owned Business Enterprises

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/WBE utilization compared to the total weighted availability of M/WBEs, measured in dollars paid. Table 13 provides the results of our analysis.

A "large" or "substantively significant" disparity is commonly defined by courts as utilization that is equal to or less than 80 percent of the availability measure. A substantively significant disparity supports the inference that the result may be caused by the disparate impacts of discrimination.[133] 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.

Table 13: Disparity Ratios by Demographic Group

Demographic Group	Disparity Ratio
Black	60.2%*
Hispanic	6.5%*
Asian	578.6%
Native American	24.3%*
White Women	32.8%*
MBE	101.4%
M/WBE	64.7%*
Non-M/WBE	109.0%**

*Indicates substantive significance at the 0.80 or below level
**Indicates statistical significance at the 0.05 level

[133] *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.").

V. ANALYSIS OF RACE AND GENDER BARRIERS IN THE MISSOURI ECONOMY

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

> Racial discrimination pervades every aspect of a society in which it is found. It is found above all in attitudes of both races, but also in social relations, in intermarriage, in residential location, and frequently in legal barriers. It is also found in levels of economic accomplishment; this is income, wages, prices paid and credit extended.[134]

This Chapter explores 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 the state's contract opportunities. First, we analyzed the rates at which M/WBEs in Missouri form firms and their earnings from those firms. Next, we summarize the literature on barriers to equal access to commercial credit. Finally, we summarize the literature on barriers to equal access to human capital. All three types of evidence have been found by the courts to be relevant and probative of whether a government will be a passive participant in discrimination without some type of affirmative interventions.

A. Disparities in Business Performance

A key element to determine the need for government intervention in the sectors of the economy where the state 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 programs. 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.[135]

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

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

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

marketplace.[136] In particular, we focused on the five sectors in which the state procures:

- Construction
- Construction-related Services
- Information technology
- Goods
- Services

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.[137]

Using both data sets, we found disparities for minorities and women in the five sectors that we studied in the state's marketplace. Overall, the results of our analyses of the Missouri 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 marketplace, the state will function as a passive participant in these potentially discriminatory outcomes.[138]

1. Disparities in Firm Sales and Payroll

One way to measure business 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

[136] 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.

[137] Data from 2010-2012 American Community Survey are the most recent for a three year period.

[138] Various appendices to this Report contain additional data and methodological explanations. Appendix A provides a list of entities that were contacted to help develop the "Master M/WBE Directory". Appendix B provides "Further Explanation of the Multiple Regression Analysis." Appendix C provides a "Further Explanation of Probit Regression Analysis." Appendix D discusses the meaning and role of "Significance Levels." Appendix E provides detailed "Additional Data from the Analysis of the Survey of Business Owners." Appendix F provides "Additional Data from the Analysis of American Community Survey."

firms.) A ratio that is less than 100% indicates an underutilization of a demographic group, and a ratio of more than 100% indicates an overutilization of a demographic group.

We explored the existence of any disparities by analyzing the Census Bureau's *Survey of Business Owners* ("SBO"), which allows us to examine disparities using individual firms as the basic unit of analysis. Administered every five years, the SBO collects data on particular characteristics of businesses that report to the Internal Revenue Service receipts of $1,000 or more.[139] 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:[140],[141]

- Non-Hispanic Blacks
- Hispanics
- 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
- Publicly-Owned Firms or firms where the ownership could not be classified by race, gender, or ethnicity

The nature of the SBO data– a sample of all businesses, not the entire universe of all businesses– required some adjustments for this Report. In particular, we had to define the sectors at the 2-digit NAICS code level and, hence, our sector definition will not exactly correspond to the definitions used for the state's contract data, for which we are able to determine sectors at the 6-digit NAICS code level. To attempt an analysis at a more detailed level would fail because when the number of firms sampled in particular demographic and sector cells is

[139] *See* http://www.census.gov/econ/sbo/about.html for more information on the Survey.

[140] Race and gender labels reflect the categories used by the Census Bureau.

[141] For expository purposes, the adjective "Non-Hispanic" will not be used in this Chapter; any racial group referenced does not include members of that group who identify ethnically as Hispanic.

very small, the Census Bureau does not report the information either to avoid disclosing data that might permit businesses to be identified or because the small sample size generates unreliable estimates of the universe. Table 1 presents information on which NAICS codes were used to define each sector.

Table 1: 2-Digit NAICS Code Definition of Sector

Sector	SBO Sector Label	2-Digit NAICS Codes
Construction	Construction	23
Construction-related Services	Professional, Scientific, and Technical Services	54
Information Technology	Information	51
Goods	Goods	31,42, 44
Services	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 on disparities within the sector. We utilize the SBO sector labels for the different industries.

Table 2 presents SBO data for all industries in the state. It indicates very large disparities in utilization as measured by sales between non-White owned firms and White male-owned firms and White female-owned firms and White male-owned firms. These disparities still exist, albeit at a lower level, when examining the payroll of only employer firms. For the four non-White groups and White women, the disparity ratio in the first two measures was under 35%.[142],[143] With the last disparity measure, the ratio for the four non-White groups and White women rise to between 52% and 80% while the ratio for White men rises to 91%. It is important to note the disparity ratios for "Firms Not Classifiable". These are publicly traded firms and their share of sales and payroll most often far exceeds there share to total number of firms.[144],[145]

[142] The Survey of Business Owners (SBO) data available via American Fact Finder do not permit the use of regression analysis on these results. This limitation means the utility of the SBO is descriptive: it paints a broad picture of the Missouri economy. The American Community Survey (ACS) data are sufficiently rich so that regression analysis can be performed and causal relationships between variables estimated.

[143] 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.").

[144] Results could not be produced for those firms that were equally owned by non-Whites and Whites. This is because the estimates did not meet the SBO's standards for publication. Throughout this section, the notation "----" will be used when estimates do not meet SBO standards or when publishing data might disclose individual firm data.

[145] Appendix E presents the data underlying these disparity ratios.

Table 2: Disparity Ratios of Firm Performance Measures, All Industries

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms[146]	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	8.87%	18.53%	64.15%
Latino	20.21%	20.50%	71.67%
Native	12.88%	15.84%	79.57%
Asian	34.39%	23.13%	51.70%
Panel B: Disparity Ratios for All Firms			
Non-White	16.54%	20.53%	60.35%
White Women	14.94%	21.41%	72.43%
White Men	63.25%	58.59%	91.11%
Equally Non-White & White	----	----	----
Equally Women & Men	24.87%	21.62%	64.24%
Not Classifiable	1696.48%	564.34%	115.17%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table 3 presents data on firm performance in the construction industry. The same basic pattern exhibited in all industries is shown in construction. Publicly-traded firms dominate the industry, and White male owned firms fare better than non-White owned firms and White female owned firms in the first two measures of disparity. The last measure of disparity– the group's share of payroll to the group's share of employees– indicates more balance across all groups. Native American construction firms do have a share of sales that exceeds their share of employer firms.

[146] Employer firms means firms that employ at least one worker.

Table 3: Disparity Ratios of Firm Performance Measures, Construction

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	30.49%	75.45%	94.72%
Latino	43.47%	60.28%	92.27%
Native	52.51%	128.52%	110.09%
Asian	30.97%	42.76%	80.51%
Panel B: Disparity Ratios for All Firms			
Non-White	38.86%	71.40%	95.65%
White Women	76.66%	67.88%	93.37%
White Men	84.64%	95.23%	98.16%
Equally Non-White & White	-----	-----	-----
Equally Women & Men	57.12%	43.11%	76.36%
Not Classifiable	1374.89%	399.06%	128.28%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table 4 reports data from the Professional, Scientific, and Technical Services industry. In this sector, the dominance of publicly-traded firms is even greater than in Construction or All Industries. When examining each performance metric, the under-utilization of White women firms is greater when compared to the under-utilization non-White firms in the aggregate. The share of sales to share of firms disparity ratios for Black and Native American firms is less than 40%. The disparity ratio profile for Asian firms is similar to that of White male firms. When examining the share of payroll to share of employees disparity ratio, the data for Black firms, Latino firms, Asian firms, and White male firms are similar; the disparity ratio for Native American firms and White women firms is less than that of the other demographic groups.

Table 4: Disparity Ratios of Firm Performance Measures
Professional, Scientific, and Technical Services

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	18.32%	40.02%	72.91%
Latino	38.87%	69.02%	76.11%
Native	33.13%	21.70%	46.49%
Asian	72.38%	68.83%	70.34%
Panel B: Disparity Ratios for All Firms			
Non-White	36.05%	55.29%	71.41%
White Women	23.08%	26.95%	59.74%
White Men	72.81%	59.96%	84.48%
Equally Non-White & White	20.61%	28.08%	58.69%
Equally Women & Men	26.71%	28.21%	60.57%
Not Classifiable	2132.36%	664.14%	125.31%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Data on the Information industry is presented in Table 5. Sampling and confidentiality issues preclude a disparity ratio analysis at the same depth as the preceding industries, but some patterns do emerge. Black, Latino, Asian, and White women firms are severely underutilized: with the first two performance measures, the disparity ratios are under 8%. White male firms fare better; however, these disparity ratios still fail to exceed 16%. The share of sales relative to the share of number of firms is extremely high for publicly traded firms.

Table 5: Disparity Ratios of Firm Performance Measures Information, Survey of Business Owners, 2007

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	2.16%	8.21%	75.64%
Latino	1.98%	----	----
Native	----	----	----
Asian	7.21%	6.16%	22.34%
Panel B: Disparity Ratios for All Firms			
Non-White	----	----	----
White Women	3.95%	5.74%	45.28%
White Men	13.74%	15.53%	65.35%
Equally Non-White & White	1.05%	----	----
Equally Women & Men	6.71%	4.77%	64.01%
Not Classifiable	1479.24%	386.51%	108.98%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table 6 contains data on the Goods industry. The utilization of White male firms is greater than that of White women firms. While the data for non-White firms in the aggregate or disaggregated are sparse, what data are available indicate that the underutilization of these firms is greater than that of White male firms.

Table 6: Disparity Ratios of Firm Performance Measures Goods, Survey of Business Owners, 2007

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	13.01%	----	----
Latino	20.06%	----	----
Native	----	----	----
Asian	45.95%	30.49%	62.85%
Panel B: Disparity Ratios for All Firms			
Non-White	----	----	----
White Women	13.11%	25.31%	82.79%
White Men	80.24%	64.53%	99.22%
Equally Non-White & White	----	----	----
Equally Women & Men	17.97%	18.68%	74.77%
Not Classifiable	1353.15%	521.49%	105.56%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Few details can be expounded about disparity ratios in the Services industry due to sampling and disclosure issues. The data in Table 7 do show a pattern similar to that exhibited in the other industries: White men have higher disparity ratios than White women and Blacks, and the disparity ratios are much smaller than those of publicly-traded firms.

Table 7: Disparity Ratios of Firm Performance Measures Services, Survey of Business Owners, 2007

	Ratio of Share of Sales to Share of All Firms	Ratio of Share of Sales to Share of Employer Firms	Ratio of Share of Payroll to Share of Employees
Panel A: Disparity Ratios for Non-White Firms			
Black	9.17%	----	----
Latino	----	----	----
Native	----	----	----
Asian	----	----	----
Panel B: Disparity Ratios for All Firms			
Non-White	----	----	----
White Women	13.23%	17.42%	70.46%
White Men	53.11%	46.19%	83.90%
Equally Non-White & White	----	----	----
Equally Women & Men	25.31%	19.63%	59.77%
Not Classifiable	1567.97%	518.19%	119.99%
All Firms	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

2. Disparities in Wages and Business Earnings

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 M/WBE Program.

In the previous section, we explored this question using SBO data. In this section, we use the Census Bureau's *American Community Survey* data to address other aspects of this question. One element asks if there exist demographic differences in the wage and salary income received by private sector workers. Beyond the issue of bias in the incomes generated in the private sector, this exploration is important for the issue of possible variations in the rate of business formation by different demographic groups. One of the determinants of business formation is the pool of financial capital at the disposal of the prospective entrepreneur. The size of this pool is related to the income level of the individual, either because the income level impacts the amount of personal savings that can be used for start-up capital or the income level affects one's ability to borrow funds. If particular demographic groups receive lower wages and salaries then they would have access to a smaller pool of financial capital, and thus reduce the likelihood of business formation.[147]

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 2010 through 2012, the most recent available.[148] 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 B.

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.

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[147] For a discussion about the academic literature and findings regarding self-employment and race, see, *e.g.,* Fairlie, R. W., "Entrepreneurship among Disadvantaged Groups: An Analysis of the Dynamics of Self-Employment by Gender, Race and Education," Handbook of Entrepreneurship, Volume 2 (2006); Fairlie R. W. and Meyer, B. D., "Ethnic and Racial Self-Employment Differences and Possible Explanations," Journal of Human Resources, (1996).

[148] For more information about the ACS PUMS, please see http://www.census.gov/acs/.

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. For example, if a table indicates that a wage coefficient for one group (*e.g*., White women) is 0.000, this indicates that there is no difference in wages for White women compared to similarly situated (*i.e*., same education, age, occupation, etc.) White men. If a wage coefficient is – 0.035 for a group, this means wages for that group are 3.5% less than similarly situated White men.

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.[149]

We report data on the five sectors. The balance of this section reports data on 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). The next section reports data on the share of a demographic group that forms a business (business formation rates) and the probabilities that a demographic group will form a business relative to White men (business formation probabilities).

Table 8 presents the findings from the wage and salary income regression analysis examining the construction industry in Missouri. This indicates the wage differential for selected demographic groups in Missouri relative to White men.

[149] Most social scientists do not endorse utilizing a confidence level of less that 95%. Appendix D explains more about statistical significance.

Table 8: Wage Differentials for Selected Groups Relative to White Men, Construction, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.685***
Hispanic	-0.141***
Native American	0.152**
Asian/Pacific Islander	-0.195***
Other	-0.133**
White Women	-0.536***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

Holding constant factors such as education, age, occupation, and industry, Blacks, Hispanics, Native Americans, White women, and Asian/Pacific Islanders in Missouri earn less than White men in the construction industry. The differential ranges between 13% less and 68% less.[150] Estimates of the coefficients for Black, Asian/Pacific Islander, and Hispanic are statistically significant at the 0.001 level. Estimates of the coefficients for Native American and White Women are statistically significant at the 0.01 level.

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 9 presents these findings.

Table 9: Business Earnings Differentials for Selected Groups Relative to White Men, Construction, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.522***
Hispanic	-0.0945***
Native American	-0.29**
Asian/Pacific Islander	-0.15**
Other	0.0
White Women	-0.511***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

150 Because the regression analyses were conducted with a log-linear functional form, the coefficients are interpreted as percentage changes. For example, the coefficient for Black --- -0.685 --- indicates that Black wages were less than the wages of White men by 68.5%.

Except for the estimates of the coefficients for Other, these variable coefficients were found to be statistically significant at the 0.001 or 0.01, levels. Business earnings for Blacks were 52% less than White men; business earnings for Hispanics were 9% less than White men; and business earnings for White women were 51% less than White men. These coefficients were significant at the 0.001 level. Business earnings for Asian/Pacific Islanders and Native Americans were 15% less and 29% less than White men, respectively, and the coefficients were significant at the 0.01 level. For the estimated coefficient for Other, the results were not found to be significantly statistically different from zero.

Table 10 presents the findings from the wage and salary income regression analysis examining the construction-related services industry in Missouri.

Table 10: Wage Differentials for Selected Groups Relative to White Men, Construction-Related Services, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.254***
Hispanic	-0.196***
Native American	-0.353***
Asian/Pacific Islander	-0.194***
Other	-0.229*
White Women	-0.336***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

Blacks, Hispanics, Native Americans, White women, and Asian/Pacific Islanders in Missouri earn less than White men in the construction-related service industry. The differential ranges between 13% less and 35% less. These estimates of the coefficients are statistically significant at the 0.001 level. Estimates of the coefficient for Other indicates they earn 23%; this is statistically significant at the 0.01 level.

Table 11 presents the findings from the analysis of business earnings in the construction-related services industry.

Table 11: Business Earnings Differentials for Selected Groups Relative to White Men, Construction-Related Services, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	0.0
Hispanic	0.0
Native American	-0.938*
Asian/Pacific Islander	-0.677***
Other	0.0
White Women	-0.862***

Legend: * p<0.05; ** p<0.01; ***p<0.001
Source: CHA calculations from the American Community Survey.

The estimates of the coefficients for Black, Hispanic, and Other were not statistically significantly different from zero. White women and Asians had business earnings 86% and 68% less than White men respectively and these variable's coefficients were found to be statistically significant at the 0.001 or 0.01, levels.

Table 12 presents the findings from the wage and salary income regression analysis examining the construction-related services industry in Missouri.

Table 12: Wage Differentials for Selected Groups Relative to White Men, Goods, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.349***
Hispanic	-0.22***
Native American	-0.339***
Asian/Pacific Islander	-0.375***
Other	-0.398***
White Women	-0.303***

Legend: * p<0.05; ** p<0.01; ***p<0.001
Source: CHA calculations from the American Community Survey.

Blacks, Other, Native Americans, White women, and Asian/Pacific Islanders in Missouri earn less than White men in the goods industry. The differential ranges between 30% less and 40% less. These estimates of the coefficients are statistically significant at the 0.001 level. Estimates of the Hispanic coefficient for indicate they earn 22% less than White men; this is statistically significant at the 0.01 level.

Table 13 presents the findings from the analysis of business earnings in the construction-related services industry.

Table 13: Business Earnings Differentials for Selected Groups Relative to White Men, Goods, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.665***
Hispanic	-0.361***
Native American	0.0
Asian/Pacific Islander	-0.162*
Other	0.0
White Women	-0.782***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

The estimates of the coefficients for Black, Hispanic, and White women were not statistically significant at the 0.001 level and indicated these groups received business earnings between 36% and 78% less than White men. The coefficient for Native American and Asian business earnings in this industry were not statistically significantly different from zero.

Table 14 presents the findings from the wage and salary income regression analysis examining the construction-related services industry in Missouri.

Table 14: Wage Differentials for Selected Groups Relative to White Men, Services, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.321***
Hispanic	-0.18***
Native American	-0.312***
Asian/Pacific Islander	-0.262***
Other	-0.255***
White Women	-0.314***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

All of the estimated coefficients in the analysis of wage differentials in the services industry were statistically significantly different from zero at the 0.001 level. Blacks, Other, Native Americans, White women, Hispanics, and Asian/Pacific Islanders in Missouri all earned less than White men. The differential ranges between 18% less and 32% less.

Table 15 presents the findings from the analysis of business earnings in the construction-related services industry.

Table 15: Business Earnings Differentials for Selected Groups Relative to White Men, Services, 2010-2012

Demographic Group	Earnings Relative to White Men (% Change)
Black	-0.443***
Hispanic	-0.368***
Native American	-0.645***
Asian/Pacific Islander	-0.33***
Other	-0.286**
White Women	-0.563***

Legend: * p<0.05; ** p<0.01; ***p<0.001

Source: CHA calculations from the American Community Survey.

The estimates of the coefficients for except for Other were statistically significant at the 0.001 level and indicated these groups received business earnings between 33% and 65% less than White men.

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 Census Bureau's American Community Survey. Tables 16, 18, 20, 22 and 24 present these results. The tables indicate that, in the vast majority of cases, White men have higher business formation rates compared to non-Whites and White women.

A subsequent question asks if any differences in business formation rate would still appear if key explanatory variables (*e.g*., age or education) are taken into account. We use a probit regression technique to answer this question and present the results in Tables 17, 19, 21, 23, and 25. Probit regression analysis is similar to the multiple regression technique used above, but now the dependent variable has a value of either zero or one. A value of zero indicates an event (*e.g*., forming a business) did not occur; a value of one indicates an event did occur. With proper statistical techniques, the number associated with a particular independent variable represents the probability of an event occurring that is associated with that variable, compared to the probability the event occurs for some control variable. For instance, in Table 17, the coefficient for Blacks is -0.0591; this indicates that Blacks have a 5.9% lower probability of forming a business compared to White men.[151] In most cases in each industry, the

[151] Appendix C provides information on probit regression analysis.

probability that non-Whites or White women form businesses is less than the probability that White men form businesses after controlling for other key explanatory variables.

**Table 16: Business Formation Rates,
All Industries, 2010-2012**

Demographic Group	Business Formation Rates
Black	4.2%
Hispanic	6.6%
Native American	10.0%
Asian/Pacific Islander	8.4%
Other	6.4%
MBE	5.4%
White Women	6.7%
MWBE	6.4%
White Male	12.1%

Source: CHA calculations from the American Community Survey.

**Table 17: Business Formation Probabilities Relative to White Males,
All Industries, 2010-2012**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-0.0591171
Hispanic	-0.0336018
Native American	-0.0478673
Asian/Pacific Islander	-0.0157332
Other	-0.011463
White Women	-0.0282604

Source: CHA calculations from the American Community Survey.

**Table 18: Business Formation Rates,
Construction, 2010-2012**

Demographic Group	Business Formation Rates
Black	21.3%
Hispanic	24.9%
Native American	32.3%
Asian/Pacific Islander	10.0%
Other	33.3%
MBE	22.8%
White Women	19.3%
MWBE	21.1%
White Male	25.2%

Source: CHA calculations from the American Community Survey.

**Table 19: Business Formation Probabilities Relative to White Males,
Construction, 2010-2012**

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-0.0897076
Hispanic	-0.0600653
Native American	-0.0995089
Asian/Pacific Islander	-0.0155082
Other	0.0181222
White Women	-0.0234482

Source: CHA calculations from the American Community Survey

**Table 20: Business Formation Rates,
Construction-Related Services, 2010-2012**

Demographic Group	Business Formation Rates
Black	0.0%
Hispanic	4.4%
Native American	0.0%
Asian/Pacific Islander	11.8%
Other	0.0%
MBE	4.8%
White Women	8.6%
MWBE	7.5%
White Male	10.5%

Source: CHA calculations from the American Community Survey.

Table 21: Business Formation Probabilities Relative to White Males, Construction-Related Services, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-0.0421125
Hispanic	-0.0073186
Native American	0.0586127
Asian/Pacific Islander	-0.0512583
Other	-0.0338389
White Women	-0.005628

Source: CHA calculations from the American Community Survey.

Table 22: Business Formation Rates, Goods, 2010-2012

Demographic Group	Business Formation Rates
Black	4.5%
Hispanic	1.5%
Native American	5.3%
Asian/Pacific Islander	17.4%
Other	0.0%
MBE	5.3%
White Women	5.4%
MWBE	5.4%
White Male	8.7%

Source: CHA calculations from the American Community Survey.

Table 23: Business Formation Probabilities Relative to White Males, Goods, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-0.0374223
Hispanic	-0.0133892
Native American	-0.0233646
Asian/Pacific Islander	0.0228243
Other	0.0082905
White Women	-0.0232203

Source: CHA calculations from the American Community Survey.

Table 24: Business Formation Rates, Services, 2010-2012

Demographic Group	Business Formation Rates
Black	3.6%
Hispanic	7.0%
Native American	8.2%
Asian/Pacific Islander	8.0%
Other	10.0%
MBE	4.9%
White Women	7.1%
MWBE	6.5%
White Male	11.9%

Source: CHA calculations from the American Community Survey.

Table 25: Business Formation Probabilities Relative to White Males, Services, 2010-2012

Demographic Group	Probability of Forming a Business Relative to White Men
Black	-0.0551005
Hispanic	-0.0308375
Native American	-0.051009
Asian/Pacific Islander	-0.0235737
Other	-0.0209325
White Women	-0.0264372

Source: CHA calculations from the American Community Survey.

B. Evidence of Disparities in Access to Business Capital

Capital is the lifeblood of any business. The interviews with business owners conducted as part of this Study confirmed that small firms, especially minority- and women-owned firms, had difficulties obtaining needed working capital to perform on Missouri's contracts and subcontracts, as well as expand the capacities of their firms. As discussed above, discrimination may even prevent firms from forming in the first place.

There is an extensive body of scholarly work on the relationship between personal wealth and successful entrepreneurship. There is a general consensus that disparities in personal wealth translate into disparities in business creation and ownership.[152]

[152] *See*, *e.g.*, Evans, David S. and Jovanovic, Boyan, "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints," Journal of Political Economy, (1989); Evans, David S. and

The Federal Reserve Board and the U.S. Small Business Administration have conducted surveys of discrimination in the small business credit market for 1993, 1998 and 2003. These Surveys of Small Business Finances ("SSBF") are based on a large representative sample of firms with fewer than 500 employees. The main finding from these Surveys is that MBEs experience higher loan denial probabilities and pay higher interest rates than white-owned businesses, even after controlling for differences in credit worthiness and other factors. Blacks, Hispanics and Asians were more likely to be denied credit than Whites, even after controlling for firm characteristics like credit history, credit score and wealth. Blacks and Hispanics were also more likely to pay higher interest rates on the loans they did receive. [153]

A recent report to the U.S. Department of Commerce summarizes these Surveys, results from the Kauffman Firm Survey,[154] data from the U.S. Small Business Administration's Certified Development Company/504 Guaranteed Loan Program[155] and additional extensive research on the effects of discrimination on opportunities for MBEs. "Disparities in Capital Access Between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs," found that

> Low levels of wealth and liquidity constraints create a substantial barrier to entry for minority entrepreneurs because the owner's wealth can be invested directly in the business, used as collateral to obtain business loans or use to acquire other businesses.… [T]he largest single actor explaining racial disparities in business creation rates are differences in asset levels."[156]

Some of the key findings of the Report include:

- Minority-owned firms are less likely to receive loans than non-minority owned firms regardless of firm size. According to an analysis of data from the Survey of Small Business Finances, for firms with gross receipts over $500,000, 52 percent of non-minority-owned firms received loans compared to 41 percent of minority-owned firms.

Leighton, Linda "Some empirical aspects of entrepreneurship," American Economic Review, (1989).

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

[154] http://www.kauffman.org/~/media/kauffman_org/research%20reports%20and%20covers/2013/06/kauffmanfirmsurvey2013.pdf.

[155] http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/sba-loan-programs/real-estate-and-eq.

[156] Fairlie, R. W. and Robb, A., "Disparities in Capital Access Between Minority and Non-Minority-Owned Businesses: The Troubling Reality of Capital Limitations Faced by MBEs," U.S. Department of Commerce, Minority Business Development Agency, 2010, pp. 22-23.

- When minority-owned firms do receive financing, it is for less money and at a higher interest rate than non-minority-owned firms regardless of the size of the firm. Minority-owned firms paid an average of 7.8 percent in interest rates for loans compared to 6.4 percent for non-minority-owned firms. Among firms with gross receipts under $500,000, minority-owned firms paid an average of 9.1 percent in interest rates compared to 6.9 percent for non-minority-owned firms.

- Minority owned firms are more likely to be denied loans. Among firms with gross receipts under $500,000, loan denial rates for minority firms were about three times higher, at 42 percent, compared to those of non-minority-owned firm, at 16 percent. For high sales firms, the rates of loam denial were almost twice as high for MBEs as for non-MBEs.

- MBEs pay higher interest rates for business loans. For all firms, MBEs paid 7.8 percent on average for loans compared with 6.4 percent for non-MBEs. The difference was smaller, but still high, between MBES and non-MBEs with high sales.

- Minority-owned firms receive smaller equity investments than non-minority owned firms even when controlling for detailed business and owner characteristics. The differences are large and statistically significant. The average amount of new equity investments in minority-owned firms receiving equity is 43 percent of the average of new equity investments in non-minority-owned firms. The differences were even larger for loans received by high sales firms. Yet, venture capital funds focusing on investing in minority firms provide returns that are comparable to mainstream venture capital firms.[157]

- Disparities in total investments in minority-owned firms compared to those in non-minority owned firms grew after the first year of business operations. According to the analysis of the data from the Kauffman Firm Survey, minority-owned firms investments into their firms were about 18 percent lower in the first year of operations compared to those of non-minority-owned firms. This disparity grew in the subsequent three years of operations, where minorities' investments into their firms were about 36 percent lower compared to those of non-minority-owned firms.

Minority entrepreneurs face challenges (including lower family wealth and difficulty penetrating financial markets and networks) directly related to race that limit their ability to secure financing for their businesses.[158]

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

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

C. Evidence of Disparities in Access to Human Capital

There is a strong intergenerational correlation with business ownership. The probability of self-employment is significantly higher among the children of the self-employed. This was evident in the large number of non-M/WBEs in our interview groups who were second, third or even higher generation firms doing business with the state. This disadvantages minorities, whose earlier generations were denied business ownership through either de jure segregation or *de facto* exclusion.

There is evidence that current racial patterns of self-employment are in part determined by racial patterns of self-employment in the previous generation.[159] Black men have been found to face a "triple disadvantage": they are less likely than White men to: 1. Have self-employed fathers; 2. Become sell-employed if their fathers were not self-employed; and 3. To follow their fathers into self-employment.[160]

Intergenerational links are also critical to the success of the businesses that do form.[161] Working in a family business leads to more successful firms by new owners. One study found that only 12.6 percent of Black business owners had prior work experiences in a family business as compared to 23.3 percent of White business owners.[162] This creates a cycle of low rates of minority ownership and worse outcomes being passed from one generation to the next, with the corresponding perpetuation of advantages to White-owned firms.

Similarly, unequal access to business networks reinforces exclusionary patterns. The composition and size of business networks are associated with self-employment rates.[163] The U. S. Department of Commerce has reported that the ability to form strategic alliances with other firms is important for success.[164] MBEs in our interviews reported that they felt excluded from the networks that help to create success in the highway construction industry.

[159] Fairlie, R W., "The Absence of the African American Owned Business, An Analysis of the Dynamics of Self-Employment," Journal of Labor Economics, (1999).

[160] Hout, M. and Rosen, H. S., "Self-employment, Family Background, and Race," *Journal of Human Resources 35*, no.4 (2000).

[161] Fairlie, R.W. and Robb, A., "Why are black-owned businesses less successful than White-owned businesses? The role of families, inheritances, and business human capital," Journal of Labor Economics, (2007).

[162] *Id*.

[163] Allen, W. D., "Social Networks and Self-Employment," *Journal of Socio-Economics 29*, no.5 (2000).

[164] Increasing MBE Competitiveness through strategic Alliances (Minority Business Development Agency, 2008).

D. Conclusion

Based upon the results of the analysis of the Census data sets, and the extensive academic literature on race-based barriers to access to business capital and human capital formation, we find that this economy-wide evidence of barriers to full and fair opportunities for firms to compete for state of Missouri contracts is the type and quality that courts have looked to determine whether a compelling interest in remedying discrimination exists.

VI. QUALITATIVE EVIDENCE OF RACE AND GENDER BARRIERS IN THE MISSOURI ECONOMY

A. Introduction

To explore anecdotal evidence of possible discrimination against minorities and women in the Missouri economy, we conducted 13 group interviews and one public meeting, totaling 197 participants. We met with business owners from a broad cross section of the industries from which the State contracts. 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 construction prime contracts and subcontracts, both with the Office of Administration and other state agencies and in the private sector, both on contracts with inclusion requirements and those without affirmative action provisions. We also elicited recommendations for improvements to OEO's M/WBE program and race- and gender-neutral procurement policies and standards, 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 Missouri through affirmative action 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 over the many sessions by participants.

B. Unequal Access to Industry and Information Networks

Many minorities and women recounted their exclusion from the industry networks necessary for success. Relationships are key to obtaining work as subcontractors and to opportunities to work as prime vendors for state agencies. M/WBEs often felt excluded or were forced to make extra efforts to create networks to connect with key decision makers, industry colleagues and potential clients.

- It's the good old boy syndrome here.

- Construction is an old boy network where all the people at the top kind of know each other because the people who own big firms, they're capable of doing all the work.

- [There is] a good old boy network … that's alive and well.

Involvement in professional and industry organizations was necessary to forge relationships that do not occur through other channels.

- You have to build a relationship with [general contractors], network with them, join A[ssociated] G[eneral] C[ontractors].

- I've been very active with associations. It's been a good thing for me. They're not going to get you business but you form the relationship to get past some of that other stuff so you have to do that. If you're a subcontractor in construction and you're not a member of the Associated General Contractors or something like that then you're crazy because that's where your work comes from.

C. Discriminatory Attitudes and Negative Perceptions of Competence

An especially subtle and difficult barrier to address is that of– often unconscious– biased perceptions and stereotypes. Minorities and women repeatedly discussed their struggles with negative perceptions of and attitudes about their capabilities by other firms and government officials.

- People look at you as, what are you doing here?

- The perception is just there that if you're Black or if you're a woman you probably don't know how to do X, Y and Z type of work. So they've already put [you] in that pigeonhole.

- I have two white male mentors who are one-person firms who are 10 to 15 years my senior who I've asked, why do you think it is that I haven't been successful as you have? One, the recession.… The second thing, they both came right out and said candidly, it's because you're a woman and you're just not taken as seriously.

- People need to talk about the fact that racism is alive and well, and sexism, in this world. And that's at the heart and soul when I have to deal with middle management. Upper management can say all they want to. I've got to go deal with the middle manager. If that middle manager has some bias, I'm going to have a problem on that project. I've faced it way too many times.

- This racism, these biases, exist within the [government] bureaucracies, too. It's not just in corporations

- A lot of times I don't really want people to know I'm minority because the perception is minorities can't do the job, they are inadequate, and I don't want that perception for my company.

- You walk into a room and they say just because you're an African-American contractor and you come in the room they assume that you're not going to be able to do the job. You still face some of that. Do I face it less now that I've gotten a little bit bigger and I've been around longer? Yea, it's less. But it is still there with folks that are new or as I try and branch out.

- We still, even as a large GC, have trouble talking to organizations because we are African-American. They don't want to deal with us either. We've been in business [many] years. We have a tried and trusted brand in many states but we see those issues.

Many M/WBEs had to meet higher performance standards than white-male owned businesses.

- There is a very, very large project going on in this region and I know of three of the largest minority firms in this region who basically can't get any work on that project because they've been blackballed. And that's an unfortunate fact, that it's all for work that might have been done 15 to 18 years ago. Now many of the [majority] firms that are working on that project have worked for that institution for many, many years. We all know how construction goes. There are issues. The same people keep working time and time again and I know they've had issues way bigger than the issues that any of us might have had.

- [Prime consultants] do look at us much more harshly.

- I was in a presentation with a project manager, who was a White gentleman, was working for the big firm. And he was touted as the expert in X, Y and Z and that's why that firm got hired. A year or two later this guy has moved to a smaller minority or woman owned company and they go to a presentation to interview and the same guy is now the project manager for them on very similar deal. Suddenly after they don't get selected, the debrief is you didn't have all the experience and your project manager was not qualified, etc., etc. And I tell you that stuff happens all the time.

- We're not getting chosen because of maybe bad past experiences [with minority contractors].… You have to go in and work double hard and do it very well as a minority.… You don't ever get the slack that White guys might give the [White] guy.

Women related the continuing effects of stereotypes about gender roles and sexist behavior from male colleagues and clients.

- I have been harassed on jobsites and networking. I used to bring a girlfriend with me to deflect.

- There is still a good old boy's network. They don't want to talk to me; they want to talk to my husband. They want to talk to a man.… In that sort of situation, I'll give you the man you want to talk to but I still own the company, I own a hundred percent, my husband can't even sign a check, he's not running things.

- When I go into meetings, if I go myself and [bring] my [male] estimator, I'm the owner, all conversations are directed towards him. If I answer, conversations are immediately directed back towards him.… And he's only worked for my company for year and a half, two years now.

- Eventually they do [treat a woman as an equal]. But it takes a lot more time than it would take unfortunately this gentleman in construction to feel legitimate talking to someone.

Hispanic owners had experienced additional bias regarding their immigration status and that of their employees' and subcontractors.

- I've heard immediately, are your contractors, are your subs or people, your employees legal? They just automatically assume that whoever we hire is illegal.

D. Obtaining Public Sector Work on an Equal Basis

Most minority and women owners were adamant that inclusion programs remain critical to reduce barriers to equal contracting opportunities and level the playing field. Firms receive little or no work without the impetus of goals.

- When the majority firms don't need the participation, we're never called.

- We are where we are because of the prime contractor and the requirement to have an MBE, WBE in there.

- I don't think there's a person in this room that wouldn't say that they would love for there not to be a need to have these programs.… But unfortunately, no matter how big you get, no matter how much history you have, these primes still believe that you are a minority firm, a woman firm, and that's what you are. And so when they don't need you, they stop calling.

- Would my work drop off if I was not an MBE? You're damn right it would.

- Without the participation goals, we wouldn't get many opportunities at all.

- People do business with people who they like to do business with. But if you haven't been in a situation where you've got a longstanding history as either women- or minority-owned businesses that they're calling on you all the time then it makes it doubly hard for you to get in the door. So, yes, the goals and the MBE whatever set asides, the goals are there for that reason I think. It will help you get a foot in the door.

- If a lot had changed, there would be a whole lot more people around this table.… We've really not added much more to the MBE, WBE engineering landscape in the last 20 years.… Because there's not a real commitment.

- Without the MBE goals, a lot of the firms don't get used.

- When it's a design-build project, if there's minority participation, we are asked to bid it. But if it's a design-build that they don't need the participation we're never asked.

- My experience has been once I'm on a job prove myself what I can do, if we get to a project where there is no goal, if we want to bid on that project they'll say, well I don't need you on that project. I can do it myself.

- Without the program, I wouldn't have the business.

- Being a WBE, we have had opportunities that we otherwise as a small business wouldn't have had.

- If the goals are in place, they're just going to play by the rules because that's what the rules are. And if the rules are zero, that's going to be what they're going to do.

- Programs of inclusion cannot solve the race problem. They only help us live with it.

- You have to be the best person and then if … there is a goal involved in the contract then you go for it and fight for it.

Firms outside the construction contractor industry found it particularly difficult to break into state or other government projects.

- I can't even count how many times I've been told by [engineering] consultants, prime consultants, that if there is no goal there is no reason for me to hire you.

- The larger firms who will definitely get these [larger] projects do not need us unless there is a goal.

- In my experience, participation goals in construction are taken a lot more seriously than in design.… And I would love to see the state get very serious about design participation goals, make sure they are complied with.

A recent disparity study conducted for the St. Louis Metropolitan Sewer District (“MSD”) failed to find evidence of discrimination sufficient to continue the use of race- and gender-based contract goals for minorities and women in most industries and for Hispanics in all industries. Based on this report, no goals are being set on many projects. The effect was immediate.

- Hispanics were eliminated from the MSD participation program. Our participation [stopped], we haven’t won a job since.… That’s had a major impact on our firm.

- For me [no longer being eligible for credit on MSD jobs], it’s been a big impact.

M/WBEs that work as prime firms found the program less useful.

- We have been WBE certified almost since we’ve opened and I am virtually one hundred percent sure it has been of absolutely no benefit to us other than the fact that we have a services contract with the state and five percent of their contract is mandated to be spent with a WBE. So we get to spend it with ourselves instead of going out and hunting for a subcontractor. But other than that, there doesn’t seem to be any benefit whatsoever to be certified.

E. Obtaining Private Sector Work or “No Goals” Work on an Equal Basis

Most participants had not been very successful in accessing private sector projects without M/WBE goals. Unless the owner or client insists on inclusion, minorities and women were mostly shut out.

- It’s all client driven.

- I was accepted to be on a team to do a proposal for a [private sector] $100,000,000 project.… This would have given me work for two or three years. And they got the project. And they had me listed as a certain percentage of their work, and then they haven’t used me.

- The level of participation by minority- and women-owned firms goes down dramatically when you take a look at private work. I know it has for me.

- A lot more times now we are the prime [consultant]. And we still have challenges in non-MBE, DBE required projects being invited.

- A lot of private stuff you don't see sometimes.… Sometimes if you go on the Dodge [Report] you'll see if they're putting it on there but if it's a private apartment complex or some job that is done by a private developer, he doesn't put [the project] on the Dodge, he goes to the general, they solicit who they want.

Some M/WBEs were able to parlay work on goals contracts into opportunities on non-goals jobs.

- I don't think I would get the work if I was not minority certified until I have built a relationship with the company.… I feel like I have to fight to prove myself. So if you do not see these stripes on my arms like the military uniform, they're here. Because I promise you every time. Once we're in though, no problem. They always call me back.

- What it's helped though is solidified my clients in the private sector and now when they have projects where they need goals they're calling.

A M/WBE general contractor stated that goals work can lead to non-goals work.

- We are the general contractor so we're picking those first tier subs…. But as the G[eneral C[ontractor], it's up to us to invite other minority- and women-owned firms to the project so that even those first tier subs know that we're serious and that we want to be inclusive. So I think you're right that people would just use who they've always used if there weren't goals on the project. But once the firm has broken in and they've been able to work on a project, then the teams are more apt to invite them back to work again on non-goal projects.

One firm reported that it obtained private sector work more easily than government contracts.

- There is much more interest in our [architecture] firm and our firm's minority status from the private side than there is from the public side.

F. 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 Missouri needs to continue to implement race- and gender-conscious remedies for these impediments, the results of the personal interviews and the public meeting are the types of evidence that, especially when considered along side 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-conscious remedies are necessary to address that discrimination.

VII. RECOMMENDATIONS FOR THE STATE OF MISSOURI'S MINORITY- AND WOMAN-OWNED BUSINESS ENTERPRISE PROGRAM

The quantitative and qualitative data presented in this Report provide a thorough examination of the evidence regarding the experiences of minority- and women-owned firms operating in the state of Missouri's geographic market area and its industry 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/WBEs' experiences in obtaining contracts in the public and private sectors. 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 compelling interest in continuing its M/WBE 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 to all firms to state prime contracting and associated subcontracting opportunities.

The following recommendations conform to strict scrutiny and describe national best practices for Missouri's M/WBE programs.

A. State Contracting and Procurement Policies and Processes

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

1. Increase Access to State Contracting Information

Many participants in the business owner interviews had difficulty accessing information about opportunities on state contracts. This included those seeking to work as prime vendors and subcontractors looking to work with prime vendors. While OA has made strides towards making information easier to find and utilize, such as posting pre-proposal sign in sheets, winning bids, etc., not all agencies were reported to be at the same level of transparency. Standardization and clear protocols would help all firms to compete.

OA could address these concerns by examining each major agency's current policies and providing best practices regarding vendor outreach and management, and user-friendly access for potential bidders and proposers. For example, the state could implement an electronic system vendor notification system to increase the ability of all firms to access information about contracting opportunities as well as the regulatory requirements necessary to perform on state contracts. Firms should be notified about contracts relevant to their NAICS codes, and they should have the ability to register their interest in a specific project to facilitate contacts and participation.

OA has recently begun to implement several helpful best practices initiatives to increase vendor access to information about state contracts and ease the paperwork burdens of compliance, including an eProcurement system. These efforts should be fully implemented, evaluated and strengthened, if necessary.

2. Increase Outreach to M/WBEs

Numerous M/WBEs requested additional outreach efforts to open up state opportunities. While OEO does attend many events, more focus on outreach and events hosted directly by the state were welcomed. Suggestions included:

- Seminars on how to do business with the state
- Networking events with agency personnel responsible for contracting decisions as well as prime vendors to increase familiarity and comfort levels between the parties.
- Information about certification for firms that had not applied.
- Speed "dating" between M/WBEs and larger prime contractors.
- Information seminars where firms in specific industries can learn about state projects and make connections.

A specific recommendation was to require prime bidders to register their interest in order for an invitation for bids or a request for proposals or qualifications to be considered responsive so that M/WBEs could know whom to contact about possible subcontracting or partnering arrangements.

The study revealed that M/WBEs are receiving few opportunities in several industry codes.[165] We suggest that special outreach be conducted to firms in those sectors so that they are aware of opportunities and can make connections with other vendors as subcontractors or joint venture partners. Activities could include targeted emails about future contracts, matchmaking events for M/WBEs, prime vendors and state agencies focusing on those industries, and identification of firms that are not currently certified with OEO but might be eligible for inclusion to encourage applications.

[165] See Table C, Executive Summary.

3. Lengthen Solicitation Times

Lengthening the time that bidders have to prepare solicitations was recommended by many participants. This was especially important for larger or more complex projects to seek M/WBE participation.

4. Review Contract Sizes and Scopes

"Unbundling" contracts into smaller segments by dollars, scopes or locations was endorsed by many firm owners as one method to provide fair access to state projects. In conjunction with reduced insurance and bonding requirements where possible, smaller contracts should permit smaller firms to move from quoting solely as subcontractors to bidding as prime contractors, as well as enhance their subcontracting opportunities. Unbundling contracts must be conducted, however, within the constraints of the need to ensure efficiency and limit costs to taxpayers.

5. Adopt "Quick Pay" Policies

While the state implements statutorily mandated prompt payment policies, many firms stated that cash flow needs impede their ability to perform as prime firms or even as subcontractors. Paying prime firms more frequently– perhaps every two weeks– would assist small prime contractors and subcontractors to be more successful. As a pilot effort, the state could implement quick pay to subcontractors as part of the SBE setaside program.

6. Review Surety Bonding and Experience Requirements

The state should review surety bonding and experience requirements so they are no greater than necessary to protect its interests. Many participants expressed concern that M/WBEs cannot meet bonding requirements and that specifications require levels of experience unlikely to be met by small firms and therefore unfairly protect incumbents and very large companies.

Regarding surety bonding, program enhancements include removing the cost of the surety bonds from the calculation of the "as read" low bidder on appropriate solicitations. A further approach would be to raise the minimum contract amount that requires a bond from $25,000. While it is possible to obtain a special waiver, this process was described as cumbersome and most likely unknown to most firms and the majority of M/WBEs and small businesses.

The state should review qualification requirements to ensure that M/WBEs and small firms are not unfairly disadvantaged and that there is adequate competition for state work. For example, equivalent experience– especially that gained by working for other government agencies– should be permitted to increase access for small firms and guard against unfair incumbent advantages.

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

Concerns about bid shopping were expressed by several M/WBEs in the construction industry. General contractors were reported to share subcontractor quotes with other firms to justify using non-M/WBEs on the basis of price. On the other hand, many prime contractors reported that using certified firms increases their costs and risks and that M/WBEs provide high quotes, either because they believe they must be utilized to get the contract or their actual costs are higher.

To investigate these claims, the state could require bidders to maintain information on pricing and date of receipt on all subcontractor quotes received on larger projects for a specified minimum time period. The prices, scopes and timing can then be evaluated to determine whether bidders are in fact soliciting and contracting with subcontractors on a non-discriminatory basis and if M/WBEs cost more than White-male owned firms.[166]

8. Adopt a Small Business Enterprise Setaside

Many small firms, both M/WBEs and non-M/WBEs, recommended setting aside some smaller contracts for bidding only by certified Small Business Enterprises as a way to create opportunities to work directly with the state. The state would have to determine the size limits for contracts (such as contracts under $500,000); the types of contracts to be included (such as only single scope jobs or multiple scope projects); firm eligibility criteria (such as the SBA size standards, or some fraction thereof, and possibly location); and certification processes (such as whether to certify firms or to accept certifications such as the SBA 8(a) or other SBE certifications). It will be critical to keep complete race and gender information on bidders to evaluate whether this is an effective race- and gender-neutral measure to reduce barriers.

9. Consider a Small Contractor Bonding and Financing Program

Access to bonding and working capital are major barriers to the development and success of M/WBEs and small firms. Traditional underwriting standards have often excluded these businesses. One approach that has proven to be effective for some governments is to develop a state-sponsored bonding and financing assistance program for such firms. This goes beyond the provision of providing information about outside bonding resources to providing actual assistance to firms through a program consultant. It is not, however, a bonding guarantee program that places the state's credit at risk or provides direct subsidies to

[166] A similar program element was part of the court-approved DBE plan for the Illinois Department of Transportation ("IDOT"). *Northern Contracting, Inc. v. Illinois Department of Transportation*, 2005 U.S. Dist. LEXIS 19868, at * 87 (Sept. 8, 2005) ("IDOT requires contractors seeking prequalification to maintain and produce solicitation records on all projects… Such evidence will assist IDOT in investigating and evaluating discrimination complaints.").

participants. Rather, this concept brings the commitment of a surety to provide a bond for firms that have successfully completed the training and mentoring program. Perhaps OEO could explore working with MoDOT on this initiative.

B. M/WBE Program Elements and Procedures

The Study's results support the determination that Missouri has a strong basis in evidence to continue to implement its M/WBE Program. The record– both quantitative and qualitative– establishes that M/WBEs 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/WBEs 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 M/WBE Goals

The availability estimates in Chapter IV should be the basis for consideration of overall, annual spending targets for state funds. We found the availability of MBEs to be 9.03 percent, and the availability of WBEs to be 10.40 percent. In view of the very large disparities we found for MBEs across the Missouri economy, the state may consider setting its aspirational goal at a somewhat higher level of 10 percent for MBEs, to encourage state agencies and prime vendors to provide equal opportunities for those firms.

2. Use the Study to Set MBE and WBE Contract Goals

As discussed in Chapter II of the Study, the state's constitutional responsibility is to ensure that goals 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. The agency weighs the estimated dollar value of the scopes of the contract as determined during the process of creating the solicitation.

2. The agency determines the availability of M/WBEs in those scopes as estimated in the Study.

3. A weighted goal is calculated based upon the scopes and the availability of firms.

4. The agency adjusts the resulting percentage based on current market conditions and progress towards the annual goals.

This targeted approach will require some training and resources for state agency staff responsible for contract development and for OEO staff responsible for monitoring goal compliance.

The state might consider adopting a flexible approach on particular contracts regarding whether to set a MBE goal and a WBE goal, or a unitary goal that permits MBEs and/or WBEs to be credited towards the goal as in the USDOT DBE program. 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 a MBE or WBE that is not owned by a minority women to be used by prime contractors to meet a larger, single goal who otherwise would seek a waivers of the separate MBE or WBE goal.

We urge agencies to bid some contracts that they determine have significant opportunities for M/WBE participation without goals. 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 programs remain needed to level the playing field for minorities and women.

3. Partner with Other Entities to Provide Technical Assistance and Supportive Services

Both M/WBEs and majority-male owned businesses supported services to assist M/WBEs to increase their skills and capabilities. However, OEO currently lacks the resources to provide technical assistance and supportive services to certified firms.

To address this critical need, the state should consider partnering with other entities. This could include serving as an information source or clearinghouse about agencies or organizations that provide services that could be of assistance and urging OEO-certified firms to access these resources. The state could also provide logistical and financial support to specific programs targeted to the industries in which the state purchases.

OEO should further consider working directly with MoDOT to include OEO M/WBEs in MoDOT’s existing efforts. Many owners praised MoDOT’s supportive services program, and value could be derived from increasing the capacities of minority- and women-owned businesses that work beyond MoDOT contracts.

4. Consider Adopting a Mentor-Protégé Program

The state should consider implementing a Mentor-Protégé Program, similar to that adopted by MoDOT. This approach was welcomed by M/WBEs and several large prime contractors as a way to increase M/WBEs’ capacities. Interview participants cited skill sets such as estimating, understanding of and adherence to specifications, billing and scheduling, accounting, safety, marketing, and meeting prequalification standards as areas in need of focus. Elements should include:

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

5. Narrowly Tailor Program Eligibility Standards

The case law has evolved significantly since the program was adopted and the last Disparity Study was conducted. 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 promulgated in the USDOT DBE program, as these regulations have been upheld by every court and have been relied upon by judges as the model in evaluating non-federal programs. 49 C.F.R. Part 26 applies the size standards of the Small Business Administration,[167] with a total cap[168], and a personal net

[167] The SBA size standards are promulgated in 13 C.F.R. Part 121.

[168] 49 C.F.R. § 26.65(b) establishes an absolute overall cap regardless of the SBA size standard.

worth test that is indexed annually[169]. 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.

The program correctly limits presumptive eligibility to Missouri-based businesses. However, out of state firms, such as those located in southern Illinois or eastern Kansas, should be eligible if they can demonstrate efforts to do business with the state or with prime vendors to the state. What determines eligibility is the market area, not whether another state provides reciprocity with Missouri, which is irrelevant from a strict scrutiny standard. While this type of reciprocal approach is relatively common for other types of procurement preferences such as price credits, it has no place in a race- and gender-based program that must be narrowly tailored to the government's particular market.

While there was general agreement that the current certification process functions well, if slowly because of resources, several interview participants mentioned the problem of firms being permitted to add codes without prior approval by OEO. This leads to confusion about whether a firm can in fact perform on a job– which is a concern of prime contractors– as well as the temptation to use passthroughs to meet goals even though the certified business cannot perform a commercially useful function. OEO should not permit this practice and should review and approve in writing all requests for new firm industry codes after initial certification.

6. Review M/WBE Contract Compliance Policies and Processes

While OEO has made recent strides in enhancing the program and providing more resources and oversight, it appears that the policy and processes to set contract goals, how bidders should establish meeting the goals or their good faith efforts to do so, and reporting requirements and forms are not standardized across agencies. There was also some confusion and uncertainty among various state departments about the program's policies and processes. This was especially true for contract goal setting, good faith efforts evaluations, and contract monitoring, including the substitution of a certified firm under contract performance. Training should be provided to all departments subject to the program, and regular updates on best practices should be shared by OEO with the agencies.

Either meeting the goals, or establishing the bidder's good faith efforts to do so, should be a condition of responsiveness; an agency should not be permitted to waive the failure to make good faith efforts. Program compliance should be treated as a material element of responsiveness and responsibility like other critical aspects of submission.

[169] The current limit is $1.32 million, exclusive of the owner's interest in the applicant and his or her primary residence.

The state should permit only a very short window after bid or proposal submission for a firm to submit the full complement of utilization plan paperwork (such as letters of intent) demonstrating that the goal will be met or that good faith efforts have been made, perhaps the close of business the next day. Identifying the successful firm and only then turning to M/WBE compliance undermines the program by treating this element of the bid differently and more leniently than other important elements. It also encourages bid shopping of subcontractors by the putatively successful bidder. Recognizing that scopes will be determined at a later date, contracts procured using the design build or construction manager method should require goals for the initial team, with goals being set for the rest of the project when more information is developed.

Failure of a vendor to make good faith efforts to meet its contractual commitments during contract performance should be treated like other failures to meet expectations and obligations. While it is imperative that the goals never operate as quotas, and circumstances often change during contract performance, insufficient monitoring and enforcement undermine the effectiveness of the program. OEO has made progress recently to increase desk monitoring, which should be continued and strengthened using an electronic system as described herein. It is also a critical best practice to conduct site visits to ensure that what is submitted matches what is occurring on the ground. OEO should supervise that process, which could be performed in many cases by the agency's project manager already assigned to the contract. Making user departments partners in this effort will be crucial to augmenting current OEO efforts.

Finally, we suggest a general review of all program policies, procedures and documents, to ensure they remain narrowly tailored and embody best practices. This would include ensuring uniformity amongst all state agencies covered by the Act. Areas of focus should include, among others, contact goal setting; counting M/WBE utilization towards contract goals; procedures to establish a bidder's good faith efforts to meet contract goals; bid or proposal submissions requirements; monitoring compliance, including substitutions of certified firms during contract performance; contract closeout procedures; and payments monitoring.

7. Provide Training to Bidders Regarding Program Compliance

There was significant confusion among prime vendors about how to meet goals, what constitutes making good faith efforts to do so, how to determine a commercially useful function and the requirements for contract performance and reporting. Many general contractors stated that the standards were unclear or arbitrary. Uniformity of approach is essential to ensure fairness and to support program administration.

OEO should conduct regularly scheduled training sessions around the state to educate firms and agency staff about the program and the elements of compliance. Webinar and on-line training materials would also be helpful. Education will be especially needed if changes are made to the program as a result of this report.

8. Implement Electronic Contracting Data Collection and Monitoring Systems

A critical element of this Study and a major challenge was data collection of full and complete prime contract and associated subcontractor records. As is very common, Missouri did not have all the information needed for the inclusion of subcontractor payments in the analysis. Moreover, the lack of electronic systems makes it much harder to process certification applications quickly, conduct outreach, track goal attainment, monitor compliance, stay in contact with firms working on state jobs and create reports for policymakers and the public. Improved data gathering should be a major focus.

The introduction of eProcurement should support better data collection. In addition, a system designed specifically for the types of information and systems critical to administering a top flight contracting affirmative action programs is needed.

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

- Contract compliance for certified and non-certified subcontract payments for all tiers for all subcontractors, regardless of certification status, with funding sources and codes; verification of prompt payments to subcontractors; task order management; data on complex contracts such as job order contracts, design/build, construction manager at risk, multi-phase, etc.; and subagency or subrecipient contract monitoring.

- Full contact information for all firms, including email addresses, NAICS codes, and race and gender ownership.

- Utilization plan capture for prime contractor’s submission of subcontractor utilization plans, including real-time verification of certification status and certified work or NAICS codes; and proposed utilization/goal validation.

- Contract/project-specific goal setting, using the data from this Study.

- An online certification application that supports electronic and hardcopy supporting documents; certification application processing, including electronic application and submission of all documents; and on-line certification directory management.

- Outreach tools for eBlasts and related communications and event management for tracking registration and attendance.

- Spend analysis of informal expenditures, such as those made with P-cards or on purchase orders, to determine the utilization of certified firms.

- An integrated email and fax notification and reminder engine to notify users of required actions, including reporting mandates and certification information and dates.

- Access by authorized state staff, subagencies, subrecipients, contractors and applicants to perform all necessary activities.

- Import/export integration with existing systems to exchange contract, payment, vendor and certification data.

C. Develop Performance Measures for Program Success

The state should develop quantitative performance measures for certified firms and overall success of the program to evaluate its effectiveness in reducing the systemic barriers identified by the Study. In addition to meeting the overall, annual goals, possible benchmarks might be:

- 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/WBE substitutions during contract performance;

- Increased bidding by certified firms;

- Increased prime contract awards to certified firms;

- Increased "capacity" of certified firms as measured by bonding limits, size of jobs, profitability, complexity of work, etc.;

- Increased variety in the industries in which M/WBEs are awarded prime contracts and subcontracts; and

- "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 programs.

D. Conduct Regular Program Reviews

To meet the requirements of strict constitutional scrutiny and ensure best practices in program administration continue to be applied, Missouri should conduct two types of regular reviews. The first is an annual evaluation of program administration and achievements that presents detailed data on goal attainment, program highlights and challenges to be met. The second is a full and thorough review of the evidentiary basis for the Program, to be conducted approximately every five years.

A sunset date for the M/WBE 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.

Appendix A: Master M/WBE Directory

To supplement the race and sex information in Dun & Bradstreet/Hoovers we used to estimate M/WBE availability in Missouri's market area, we contacted 178 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 will be 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 M/WBE list, we obtained lists from the following entities:

Arkansas State Highway and Transportation Department
Black Contractors United
Business Research Services
Center for the Acceleration of African-American Business
Chicago Chinatown Chamber of Commerce
Chicago Minority Suppliers Development Council
Chicago Rockford International Airport
Chicago United
Chicago Urban League
City of Chicago, Illinois
City of Little Rock, Arkansas
City of Rockford, Illinois
Cook County, Illinois
Des Moines Area Regional Transit Authority
Diversity Information Resources
DuPage County, Illinois
Federation of Women Contractors
Hispanic American Construction Industry
Hispanic Chamber of Commerce of Metropolitan St. Louis
Illinois Department of Central Management Services
Illinois Department of Transportation
Illinois State Black Chamber of Commerce
Iowa Department of Inspections & Appeals: Certified Targeted Small Business
Iowa Department of Transportation

Kansas Department of Commerce
Kansas City Metropolitan Community Colleges
Minority Contractors Association
Missouri Department of Transportation
Missouri State University
National Organization of Minority Architects
National Women Business Owners Corporation
Nebraska Department of Roads
PACE Bus Service
Sedgwick County, Kansas
Small Business Administration
St. Louis Minority Business Council
University of Missouri System: Minority Business Development
Women Construction Owners and Executives
Wyandotte County, Kansas

The following entities had relevant lists of M/W/DBEs that were duplicates of the lists we obtained:

Cape Girardeau County, Missouri
City of Davenport, Iowa
City of Jefferson City, Missouri
City of Kansas City, Missouri
City of Omaha, Nebraska
City of Springfield, Missouri
City of St. Louis DBE directory
Des Moines International Airport
East-West Gateway Council of Governments
Jasper County, Missouri
Johnson County, Kansas
Kansas City Area Transportation
Kansas City Council of Women Business Owners
Lambert St. Louis International Airport DBE Program Office
Little Rock School District
Mid-America Regional Council

MO-KAN Economic & Community Development Organization
Omaha Public Schools
Platte County, Missouri
St. Louis County, Missouri
St. Louis METRO
St. Louis Public Schools
Tyson
U.S. Women's Chamber of Commerce

The following entities either did not have a list of M/W/DBEs or the list did not include race and gender information:

100 Black Men Missouri Chapter
100 Black Men National Chapter
American Business Women Association Missouri Chapter
American Business Women Association National Chapter
Asian Women in Business
Benton County, Arkansas
Black Economic Union
Boone County, Missouri
Buchanan County, Missouri
Callaway County, Missouri
Cass County, Missouri
Christian County, Missouri
City of Blue Springs, Missouri
City of Cape Girardeau, Missouri
City of Cedar Rapids, Iowa
City of Chesterfield Department of Economic Development
City of Columbia, Missouri
City of Des Moines, Iowa
City of Florissant, Missouri
City of Fort Smith, Arkansas
City of Gladstone, Missouri
City of Independence, Missouri

City of Joplin, Missouri
City of Lawrence, Kansas
City of Lee’s Summit, Missouri
City of O’Fallon, Missouri
City of Overland Park, Kansas
City of Raytown, Missouri
City of Sioux City, Iowa
City of St. Charles, Missouri
City of St. Joseph, Missouri
City of St. Peters, Missouri
City of University City, Missouri
Cole County, Missouri
Diversity Awareness Partnership
Douglas County, Nebraska
Grace Hill Women’s Development Center
Greater Kansas City Coalition of Hispanic Organizations
Greene County, Missouri
GSA Heartland Office of Small Business Utilization
Independence School District
Jackson County, Missouri
Jefferson City Public Schools
Johnson County Kansas Economic Research Institute
Kansas Department of Transportation
Kansas University
KC SmartPort
Lawrence County, Kansas
Lawrence Regional Technology Center
Lincoln Airport Authority
Lincoln University
Linn County, Iowa
Missouri Women’s Council
National Center for American Indian Enterprise Development
National Coalition of 100 Black Women Missouri Chapter
National Coalition of 100 Black Women National Chapter
Park Hill School District

Polk County, Iowa
Professional Organization of Women, Inc.
St. Louis Black Leadership Roundtable
St. Louis Business Diversity Initiative
St. Louis Business Resource Center
St. Louis Development Corporation
St. Louis Economic Development Partnership Business Development Division
University of Central Missouri, Procurement Dept.
University of Missouri Extension: Small Business Technology Center
University of Missouri, Columbia
US Pan Asian Chamber of Commerce
Washington County, Arkansas
Women's Chamber of Commerce of Kansas City

We were unable to obtain lists from the following entities:

African Chamber of Commerce of Kansas City
Arkansas Economic Development Commission
Asian American Chamber of Commerce of Kansas City
Asian-American Chamber of Commerce of St. Louis
Black Chamber of Commerce of Kansas City
City of Lincoln and Lancaster County NE
City of Olathe, KS
City of Topeka, KS
City of Wichita, KS
Clay County, MO
Harris Stowe University
Hispanic Chamber of Commerce of Greater Kansas City
Hispanic Contractors Association of Greater Kansas City, Inc.
Hispanic Economic Development Corporation
Kansas Black Chamber of Commerce
Kansas City Hispanic Association Contractors Enterprises Inc.
Kansas Community College
Little Rock National Airport

MoKan: St. Louis Construction Contractors Assistance Center
National Association of Women in Construction Kansas City
National Association of Women in Construction St. Louis
Pulaski County, AR
Shawnee County, KS (Purchasing)
Springfield Black Chamber of Commerce
St. Charles County, MO
St. Louis Asian Business Owners Association
St. Louis Community Empowerment Foundation - Minority Contractors Initiative

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

American Indian Enterprise & Business Council
City of Kansas City, MO M/WBE directory
City of St. Louis M/WBE directory
Johnson Community College: Heartland Procurement Technical Assistance Center
Kansas City Aviation Department
National Association for the Advancement of Colored People East St. Louis
National Association for the Advancement of Colored People Kansas City
National Association for the Advancement of Colored People Mar-Saline
National Association for the Advancement of Colored People Springfield
National Association for the Advancement of Colored People St. Louis
National Association for the Advancement of Colored People State
National Association of Women Business Owners
National Association of Women Business Owners Kansas City
National Association of Women Business Owners St. Louis
National Minority Supplier Development Council: Mid-America
National Minority Supplier Development Council: Mid-States
National Minority Supplier Development Council: Wisconsin Iowa and Central Illinois
Women's Business Enterprise National Council

Appendix B: Further Explanation of the Multiple Regression Analysis

As discussed in the Study, 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; β1, β2 and β3 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 and consequently, the statistical analysis included these variables. However, the impact of these variables may not be identical across state boundaries (*i.e.*, the impact of being Black on wages is different in Missouri than it is in California). Because of our interest in the impact of race and gender on wages and earnings, we made an adjustment in the model to take into account the differential impacts of race and gender across states We therefore developed new variables that would show the interaction between race and gender and Missouri. The coefficient for the new variable showed the impact of being a member of that race or gender in Missouri. 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 the 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; β1, β2, and β3 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.[170] However, in the probit model, the initial coefficients cannot be interpreted this way. One additional step– which can be computed easily by most statistical packages– must be undertaken in order to yield a result that indicates how the change in the independent variable affects the probability of an event (*e.g*. business formation) occurs. For instance, using

[170] The exact interpretation depends upon the functional form of the model.

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 Study contain asterisks indicating a number has statistical significance at 0.001 or 0.01 levels and the body of the Study repeats these descriptions. While the use of the term seems important, it is not self-evident what it means. This Appendix provides a general explanation of significance levels.

This Study 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 Missouri as it explores the necessity of remedial intervention in the marketplace is, do non-Whites and White women receive lower wages than White men? As discussed in Appendix B, one way to uncover the relationship between the dependent variable (*e.g*., wages) and the independent variable (*e.g*., non-Whites) is through multiple regression analysis. An example helps to explain this concept.

Let us say this analysis determines that non-Whites receive wages that are 35% less than White men after controlling for other factors, such as education and industry, which might account for the differences in wages. However, this finding is only an estimate of the relationship between the independent variable (*e.g*., non-Whites) and the dependent variable (*e.g*., wages) – the first sub-question. It is still important to determine how accurate is that estimation, that is, what is the probability the estimated relationship is equal to zero – the second sub-question.

To resolve the second sub-question, statistical hypothesis tests are utilized. Hypothesis testing assumes that there is no relationship between belonging to a particular demographic group and the level of economic utilization relative to White men (*e.g*., non-Whites earn identical wages compared to White men or non-Whites earn 0% less than White men). This sometimes is called the null hypothesis. We then calculate a confidence interval to explore the probability that the observed relationship (*e.g*., - 35%) is between 0 and minus that confidence interval.[171] The confidence interval will vary depending upon the level of confidence (statistical significance) we wish to have in our conclusion. Hence, a

[171] 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.

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: Survey of Business Owners, 2007[172],[173]

Table E1: Data on Firm Performance Measures, All Industries

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	24,357	2,393,618	2,261	1,963,945	18,682	449,477
Latino	6,178	1,383,964	1,264	1,215,073	9,520	255,886
Native	2,742	391,443	430	319,318	2,397	71,524
Asian	9,563	3,644,787	3,111	3,372,821	25,317	490,905
Panel B: Data for All Firms						
Non-White	42,745	7,834,846	7,164	6,895,354	56,821	1,285,910
White Women	114,322	18,931,307	16,714	16,776,780	125,491	3,408,756
White Men	214,022	150,042,343	51,879	142,495,601	713,923	24,392,736
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	106,407	29,328,050	25,189	25,531,600	189,573	4,567,328
Not Classifiable	18,529	348,421,943	13,139	347,626,676	1,260,187	54,429,799
All Firms	501,064	555,390,875	115,180	539,987,440	2,353,747	88,270,340

Source: CHA calculations from the Survey of Business Owners.

[172] These data include firms whose ownership could not be classified.

[173] For a variety of reasons, the Survey of Business Owners did not result in reliable data for firms that were equally owned by whites and non-whites.

Table E2: Data on Firm Performance Measures (%), All Industries

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	4.86%	0.43%	1.96%	0.36%	0.79%	0.51%
Latino	1.23%	0.25%	1.10%	0.23%	0.40%	0.29%
Native	0.55%	0.07%	0.37%	0.06%	0.10%	0.08%
Asian	1.91%	0.66%	2.70%	0.62%	1.08%	0.56%
Panel B: Data for All Firms						
Non-White	8.53%	1.41%	6.22%	1.28%	2.41%	1.46%
White Women	22.82%	3.41%	14.51%	3.11%	5.33%	3.86%
White Men	42.71%	27.02%	45.04%	26.39%	30.33%	27.63%
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	21.24%	5.28%	21.87%	4.73%	8.05%	5.17%
Not Classifiable	3.70%	62.73%	11.41%	64.38%	53.54%	61.66%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table E3: Data on Firm Performance Measures, Construction

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	1,558	237,325	129	205,742	1,061	45,597
Latino	869	188,728	112	142,700	806	33,744
Native	573	150,320	47	127,687	588	29,371
Asian	382	59,113	48	43,384	301	10,996
Panel B: Data for All Firms						
Non-White	3,156	612,731	335	505,611	2,740	118,914
White Women	5,248	2,010,087	1,313	1,884,059	11,494	486,928
White Men	48,806	20,639,278	9,461	19,044,455	83,187	3,705,113
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	16,393	4,678,363	4,275	3,895,449	24,807	859,430
Not Classifiable	1,430	9,823,414	1,157	9,759,747	29,490	1,716,443
All Firms	75,849	37,897,263	16,637	35,167,455	152,223	6,906,767

Source: CHA calculations from the Survey of Business Owners.

Table E4: Data on Firm Performance Measures (%), Construction

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	2.05%	0.63%	0.78%	0.59%	0.70%	0.66%
Latino	1.15%	0.50%	0.67%	0.41%	0.53%	0.49%
Native	0.76%	0.40%	0.28%	0.36%	0.39%	0.43%
Asian	0.50%	0.16%	0.29%	0.12%	0.20%	0.16%
Panel B: Data for All Firms						
Non-White	4.16%	1.62%	2.01%	1.44%	1.80%	1.72%
White Women	6.92%	5.30%	7.89%	5.36%	7.55%	7.05%
White Men	64.35%	54.46%	56.87%	54.15%	54.65%	53.64%
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	21.61%	12.34%	25.70%	11.08%	16.30%	12.44%
Not Classifiable	1.89%	25.92%	6.95%	27.75%	19.37%	24.85%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table E5: Data on Firm Performance Measures, Professional, Scientific, and Technical Services

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	1,920	132,981	164	103,598	929	40,005
Latino	713	104,790	85	92,596	735	33,040
Native	179	22,427	40	13,699	120	3,295
Asian	921	252,069	210	228,161	2,134	88,657
Panel B: Data for All Firms						
Non-White	3,772	514,156	503	438,939	3,925	165,547
White Women	13,546	1,182,458	2,163	920,143	9,509	335,534
White Men	26,876	7,399,796	6,967	6,594,133	51,134	2,551,346
Equally Non-White & White	565	44,033	70	31,020	438	15,184
Equally Women & Men	9,872	997,050	1,775	790,485	7,968	285,035
Not Classifiable	1,369	11,038,557	1,049	10,996,611	64,061	4,741,243
All Firms	56,001	21,176,050	12,526	19,771,332	137,035	8,093,889

Source: CHA calculations from the Survey of Business Owners.

Table E6: Data on Firm Performance Measures (%), Professional, Scientific, and Technical Services

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	3.43%	0.63%	1.31%	0.52%	0.68%	0.49%
Latino	1.27%	0.49%	0.68%	0.47%	0.54%	0.41%
Native	0.32%	0.11%	0.32%	0.07%	0.09%	0.04%
Asian	1.64%	1.19%	1.68%	1.15%	1.56%	1.10%
Panel B: Data for All Firms						
Non-White	6.74%	2.43%	4.02%	2.22%	2.86%	2.05%
White Women	24.19%	5.58%	17.27%	4.65%	6.94%	4.15%
White Men	47.99%	34.94%	55.62%	33.35%	37.31%	31.52%
Equally Non-White & White	1.01%	0.21%	0.56%	0.16%	0.32%	0.19%
Equally Women & Men	17.63%	4.71%	14.17%	4.00%	5.81%	3.52%
Not Classifiable	2.44%	52.13%	8.37%	55.62%	46.75%	58.58%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table E7: Data on Firm Performance Measures, Information

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	245	16,969	13	14,292	154	6,541
Latino	43	2,733	1	----	----	----
Native	26	D	2	----	----	----
Asian	65	15,043	14	11,556	194	2,433
Panel B: Data for All Firms						
Non-White	379	----	31	----	----	----
White Women	1,155	146,441	167	128,434	1,804	45,870
White Men	2,809	1,239,060	558	1,160,673	9,012	330,679
Equally Non-White & White	26	873	1	----	----	----
Equally Women & Men	998	215,077	282	180,200	1,728	62,111
Not Classifiable	352	1,6,719,880	323	16,715,723	55,998	3,426,558
All Firms	5,720	18,367,428	1,361	18,223,239	69,023	3,875,609

Source: CHA calculations from the Survey of Business Owners.

Table E8: Data on Firm Performance Measures (%), Information

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	4.28%	0.09%	0.96%	0.08%	0.22%	0.17%
Latino	0.75%	0.01%	0.07%	----	----	----
Native	0.45%	----	0.15%	----	----	----
Asian	1.14%	0.08%	1.03%	0.06%	0.28%	0.06%
Panel B: Data for All Firms						
Non-White	6.63%	----	2.28%	----	----	----
White Women	20.19%	0.80%	12.27%	0.70%	2.61%	1.18%
White Men	49.11%	6.75%	41.00%	6.37%	13.06%	8.53%
Equally Non-White & White	0.45%	0.00%	0.07%	----	----	----
Equally Women & Men	17.45%	1.17%	20.72%	0.99%	2.50%	1.60%
Not Classifiable	6.15%	91.03%	23.73%	91.73%	81.13%	88.41%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table E9: Data on Firm Performance Measures, Goods

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	2,083	1,024,396	220	----	----	----
Latino	596	451,852	----	----	----	----
Native	----	----	----	----	----	----
Asian	1,241	2,154,917	656	2,124,645	4,435	95,760
Panel B: Data for All Firms						
Non-White	----	----	----	----	----	----
White Women	19,794	9,806,523	3,517	9,454,668	32,137	914,088
White Men	29,016	87,979,871	12,706	87,081,280	245,800	8,379,275
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	22,180	15,061,493	7,227	14,337,484	53,819	1,382,486
Not Classifiable	3,613	184,746,189	3,335	184,723,550	402,448	14,594,875
All Firms	79,799	301,550,717	28,190	299,417,993	743,219	25,534,172

Source: CHA calculations from the Survey of Business Owners.

Table E10: Data on Firm Performance Measures (%). Goods

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	2.61%	0.34%	0.78%	----	----	----
Latino	0.75%	0.15%	----	----	----	----
Native	----	----	----	----	----	----
Asian	1.56%	0.71%	2.33%	0.71%	0.60%	0.38%
Panel B: Data for All Firms						
Non-White	----	----	----	----	----	----
White Women	24.80%	3.25%	12.48%	3.16%	4.32%	3.58%
White Men	36.36%	29.18%	45.07%	29.08%	33.07%	32.82%
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	27.79%	4.99%	25.64%	4.79%	7.24%	5.41%
Not Classifiable	4.53%	61.27%	11.83%	61.69%	54.15%	57.16%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Table E11: Data on Firm Performance Measures, Services

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	18,324	973,916	----	----	----	----
Latino	----	----	----	----	----	----
Native	----	----	----	----	----	----
Asian	----	----	----	----	----	----
Panel B: Data for All Firms						
Non-White	----	----	----	----	----	----
White Women	73,421	5,627,680	8,889	4,237,384	69,060	1,556,747
White Men	102,737	31,614,314	21,840	27,609,098	307,296	8,248,460
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	54,782	8,032,429	11,289	6,065,340	99,030	1,893,702
Not Classifiable	12,297	111,717,905	7,831	111,058,605	648,360	24,888,875
All Firms	276,700	160,322,749	55,390	151,592,780	1,170,900	37,460,497

Source: CHA calculations from the Survey of Business Owners.

Table E12: Data on Firm Performance Measures (%), Services

	Number of firms with or without paid employees	Sales, receipts, or value of shipments of firms with or without paid employees ($1,000)	Number of firms with paid employees	Sales, receipts, or value of shipments of firms with paid employees ($1,000)	Number of paid employees for pay period including March 12	Annual payroll ($1,000)
Panel A: Data for Non-White Firms						
Black	6.62%	0.61%	----	----	----	----
Latino	----	----	----	----	----	----
Native	----	----	----	----	----	----
Asian	----	----	----	----	----	----
Panel B: Data for All Firms						
Non-White	----	----	----	----	----	----
White Women	26.53%	3.51%	16.05%	2.80%	5.90%	4.16%
White Men	37.13%	19.72%	39.43%	18.21%	26.24%	22.02%
Equally Non-White & White	----	----	----	----	----	----
Equally Women & Men	19.80%	5.01%	20.38%	4.00%	8.46%	5.06%
Not Classifiable	4.44%	69.68%	14.14%	73.26%	55.37%	66.44%
All Firms	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: CHA calculations from the Survey of Business Owners.

Appendix F: Additional Data from the American Community Survey, 2010-2012

Table F1: Partial Results from Log-linear Regression Analysis: Dependent Variable: Logarithm of Wages, Construction

Independent Variable	Coefficient
Black	-0.351***
Latino	-0.141***
Native American	-0.343***
Asian/Pacific Islander	-0.195***
Other	-0.133**
White Women	-0.337***
MO_Black	-0.334***
MO_Latino	-0.196*
MO_Native American	0.495**
MO_Asian/Pacific Islander	-0.0297
MO_ Other	0.391
MO_White Women	-0.199***
Adjusted R-Squared	0.258
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: Dependent Variable: Logarithm of Wages, Construction-related Services

Independent Variable	Coefficient
Black	-0.254***
Latino	-0.196***
Native American	-0.353***
Asian/Pacific Islander	-0.194***
Other	-0.229*
White Women	-0.336***
MO_Black	-0.126
MO_Latino	-0.0994
MO_Native American	0.188
MO_Asian/Pacific Islander	-0.104
MO_ Other	0.127
MO_White Women	0.133
Adjusted R-Squared	0.383
Legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American Community Survey.

Table F3: Partial Results from Log-linear Regression Analysis: Dependent Variable: Logarithm of Wages, Goods

Independent Variable	Coefficient
Black	-0.349***
Latino	-0.22***
Native American	-0.339***
Asian/Pacific Islander	-0.375***
Other	-0.398***
White Women	-0.405***
MO_Black	0.0861
MO_Latino	0.0513
MO_Native American	-0.0883
MO_Asian/Pacific Islander	0.00041
MO_ Other	0.863
MO_White Women	0.102***
Adjusted R-Squared	0.381
Legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American Community Survey.

Table F4: Partial Results from Log-linear Regression Analysis: Dependent Variable: Logarithm of Wages, Services

Independent Variable	Coefficient
Black	-0.321***
Latino	-0.18***
Native American	-0.312***
Asian/Pacific Islander	-0.262***
Other	-0.255***
White Women	-0.314***
MO_Black	0.0264
MO_Latino	0.0347
MO_Native American	0.154
MO_Asian/Pacific Islander	-0.0402
MO_ Other	-0.0761
MO_White Women	0.0314*
Adjusted R-Squared	0.481
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: Dependent Variable: Logarithm of Business Earnings, Construction

Independent Variable	Coefficient
Black	-0.522***
Latino	-0.0945***
Native American	-0.29**
Asian/Pacific Islander	-0.15**
Other	-0.293
White Women	-0.511***
MO_Black	0.302
MO_Latino	0.115
MO_Native American	0.21
MO_Asian/Pacific Islander	-0.704
MO_ Other	0.154
MO_White Women	-0.527*
Adjusted R-Squared	0.0733
Legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American Community Survey.

Table F6: Partial Results from Log-linear Regression Analysis: Dependent Variable: Logarithm of Business Earnings, Construction-related Services

Independent Variable	Coefficient
Black	-0.241
Latino	-0.161
Native American	-0.938*
Asian/Pacific Islander	-0.677***
Other	-0.864
White Women	-0.862***
MO_Black	(omitted)
MO_Latino	1.16
MO_Native American	(omitted)
MO_Asian/Pacific Islander	(omitted)
MO_ Other	(omitted)
MO_White Women	-0.345
Adjusted R-Squared	0.111
Legend: * p<0.05; ** p<0.01; ***p<0.001	

Source: CHA calculations from the American Community Survey.

Table F7: Partial Results from Log-linear Regression Analysis: Dependent Variable: Logarithm of Business Earnings, Goods

Independent Variable	Coefficient
Black	-0.665***
Latino	-0.361***
Native American	-0.518
Asian/Pacific Islander	-0.162*
Other	-0.0329
White Women	-0.782***
MO_Black	0.728
MO_Latino	0.128
MO_Native American	(omitted)
MO_Asian/Pacific Islander	0.383
MO_ Other	(omitted)
MO_White Women	0.351
Adjusted R-Squared	0.0937
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: Dependent Variable: Logarithm of Business Earnings, Services

Independent Variable	Coefficient
Black	-0.443***
Latino	-0.368***
Native American	-0.645***
Asian/Pacific Islander	-0.33***
Other	-0.286**
White Women	-0.563***
MO_Black	-0.163
MO_Latino	-0.425*
MO_Native American	0.102
MO_Asian/Pacific Islander	-0.258
MO_ Other	-0.0768
MO_White Women	-0.137
Adjusted R-Squared	0.185
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: Dependent Variable: Probability of Forming a Business, Construction

Independent Variable	Coefficient
Black	-0.3188678
Latino	-0.2135036
Native American	-0.3537071
Asian/Pacific Islander	-0.0551244
Other	0.0644157
White Women	-0.0833472
MO_Black	0.3391893
MO_Latino	0.4089243
MO_Native American	0.1098838
MO_Asian/Pacific Islander	-0.7572839
MO_ Other	0.2338916
MO_White Women	0.1148898
Pseudo R-Squared	0.087

Source: CHA calculations from the American Community Survey.

**Table F10: Partial Results from Probit Regression Analysis:
Dependent Variable: Probability of Forming a Business,
Construction-related Services**

Independent Variable	Coefficient
Black	-0.2583642
Latino	-0.0449006
Native American	0.3595944
Asian/Pacific Islander	-0.3144743
Other	-0.2076049
White Women	-0.034528
MO_Black	0.0
MO_Latino	-0.6697849
MO_Native American	0.0
MO_Asian/Pacific Islander	0.6080016
MO_ Other	0.0
MO_White Women	0.0992106
Pseudo R-Squared	0.1313

Source: CHA calculations from the American Community Survey.

Table F11: Partial Results from Probit Regression Analysis: Dependent Variable: Probability of Forming a Business, Goods

Independent Variable	Coefficient
Black	-0.3381665
Latino	-0.1209913
Native American	-0.2111337
Asian/Pacific Islander	0.2062516
Other	0.0749169
White Women	-0.2098299
MO_Black	0.3204768
MO_Latino	-0.2833904
MO_Native American	-0.5274436
MO_Asian/Pacific Islander	0.2075478
MO_ Other	0
MO_White Women	0.0188207
Pseudo R-Squared	0.117

Source: CHA calculations from the American Community Survey.

Table F12: Partial Results from Probit Regression Analysis: Dependent Variable: Probability of Forming a Business, Services

Independent Variable	Coefficient
Black	-0.3954225
Latino	-0.2213017
Native American	-0.3660601
Asian/Pacific Islander	-0.169174
Other	-0.1502197
White Women	-0.1897236
MO_Black	-0.0933291
MO_Latino	0.1233296
MO_Native American	0.1188735
MO_Asian/Pacific Islander	-0.0174778
MO_ Other	0.0857397
MO_White Women	-0.02111
Pseudo R-Squared	0.1646

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.

DBE: Disadvantaged Business Enterprise, as defined in 49 C.F.R. Part 26.

DPMM: Division of Purchasing and Materials Management within the Office of Administration, State of Missouri.

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.

FMDC: Division of Facilities Management, Design and Construction within the Office of Administration, State of Missouri.

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/W/DBE: Collectively, Minority-Owned Business Enterprise, Woman-Owned Business Enterprise, and Disadvantaged Business Enterprise.

MoDOT: Missouri Department of Transportation.

NAICS: North American Industry Classification System. The standard coding system for classifying industry-based data in the U.S.

OA: State of Missouri's Office of Administration.

OEO: Office of Equal Opportunity, the entity responsible for administering the M/WBE program.

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.

SBE: Small Business Enterprise.

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.

WBE: Woman-Owned Business Enterprise.