SUMMARY REPORT

Contracting Barriers and Factors Affecting Minority Business Enterprises

A REVIEW OF EXISTING DISPARITY STUDIES



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PREPARED FOR

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Foreword

Winning contracts that buy your products, services, proprietary work processes, or intellectual property is what every entrepreneur strives to accomplish when they go into business. Contracts are the business barometer that measure the health of your business and determine whether you grow, stagnate, or fail. For America to build a healthy and inclusive economy, minority business enterprises (MBEs), must have full and fair access to the range of local, state and federal contracting opportunities. Disparity studies conducted over the past 10 years at the state and local levels tell a much different story.

This study, Barriers and Factors Affecting Minority Business Enterprises: A Review of Existing Disparity Studies, was commissioned by the U.S. Department of Commerce, Minority Business Development Agency to expose the patterns and trends uncovered in these disparity studies and to quantify the impact of discrimination in America's procurement systems. In doing so, it reveals that MBEs typically obtain a lower number and dollar value of contracts in proportion to the number of MBEs available. The report also reveals that the industry groups experiencing the highest ratios of disparity include construction, professional services, architecture, engineering services, and goods and supplies.

Beyond the civil injustices that have been protested across the country and the disenfranchisement of minority communities, there are distinct underlying issues that primarily center on economic disparity. Unemployment, low workforce readiness, lack of transportation infrastructure, a shortage of affordable housing, and social issues have negatively impacted minority communities nationwide. While MBEs are contributing to the economic vitality of these communities by addressing social issues in new ways, they must have the opportunity to develop capacity and entry points into the industries of tomorrow. Local governments must change their economic development models that enable MBEs to grow and create jobs, serve as positive role models to disadvantaged youth, and expose residents to innovation and emerging industries to generate wealth creation. These business owners seek new opportunities that will allow them to engage with the entire community in order to make a broader impact.

Civic participation is critical to MBEs as their dedication goes beyond economic success. If we are to improve the government's ability to advance community conditions capable

of deterring civil injustices and targeting of our law enforcement officers, then our federal response must be guided by interagency collaboration, law enforcement understanding, public investment, and a sense of urgency.

The findings of this report raise questions about the current and future state of economic development in the U.S., in particular as the population moves inexorably to 'majority-minority' status. It also points out implications for the Nation's economic health should MBEs not have the opportunity to fully participate in government contracting. During the past 45 years, MBDA has provided MBEs with resources to support and advance their success in growing the U.S. economy. Today, many MBEs have proven to be major catalysts for economic growth, job creation, innovation, and entrepreneurship. Due to our unique position, MBDA has distinct insight regarding current civil unrest issues that plague these communities, which historically have benefited from the Agency's funding and resources. This long-term engagement has helped MBDA to identify promising business opportunities that create jobs and generate wealth.

Since 2009, MBDA has helped minority-owned firms access more than \$34.8 billion in contracts and capital, which resulted in more than 153,000 jobs created and retained.*

We know that there is more to do. This report is presented for full consideration by corporate CEOs and boards of directors, governors, state/local legislators, mayors, tribal leaders, law enforcement/criminal justice and economic development leaders, procurement officers, transportation and infrastructure officials, business owners, and pension fund managers and investors, in the spirit of generating positive momentum toward the goal of shrinking, and ultimately eliminating, disparities in contracting nationwide.

We encourage you to read the full report which covers the legal framework of disparity studies and offers a primer for those embarking upon disparity studies at the state and local levels. It also offers an in depth quantitative analysis of disparity ratios and a qualitative review of anecdotal evidence. Our hope is that this report will give policy makers and MBE advocates the information and data they need to make systemic changes.

Alejandra Y. Castillo

National Director
Minority Business Development Agency
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*U.S. Department of Commerce, Minority Business Development Agency performance and CRM systems, Retrieved December 12, 2016.

Executive Summary

Analysis of public contracting data indicates that substantial disparities exist between minority and non-minority business enterprises. Specifically, the data show that minority business enterprises (MBEs) typically secure a lower number and dollar amount of contracts in proportion to the number of available MBEs in a relevant market. As a result, MBEs, agency officials, policy makers, and advocates have a strong incentive to understand the factors that give rise to observed contracting disparities. In order to advance the dialogue concerning contracting disparities and inform the development of new and innovative solutions, the Minority Business Development Agency (MBDA) requested a comprehensive review of existing data and studies to address several key research questions:

- What factors create barriers and cause disparities in public contracting for MBEs?
- What information do existing studies provide stakeholders in assisting agencies address observed disparities?
- What areas warrant further investigation and policy research with respect to contracting disparities experienced by MBEs?

This research explored existing disparity studies conducted by a variety of economic consultants that were commissioned by local and state governments nationwide. A disparity study is a comprehensive effort that analyzes a wealth of data pertaining to the legal, legislative, and contracting environment facing MBEs in a particular jurisdiction or when procuring contracts from a specific federal, state or municipal agency. The findings presented in this report are drawn from a comprehensive review of 100 disparity studies, summaries, and reports that are publicly-available and accessible via the internet (Appendix A). The selected set of disparity studies does not represent the full universe of studies and includes a greater focus on recent studies with information on contracting disparities affecting MBEs within the last ten years.

LEGAL PRECEDENT AND DISPARITY STUDY BASICS

The evolution and development of disparity studies arose from legal challenges to existing affirmative action or race-conscious programs¹ enacted by government rules, legislation or policies intended to alleviate perceived or actual discrimination against different racial, ethnic or gender groups in public contracting. In response to the legal precedent,² government agencies have commissioned disparity studies to examine the extent to which minority contractors are underutilized in public procurement in a particular industry and geography, such that the agency can determine whether a legallydefensible race-conscious program is justified or needed to provide remedial relief given discriminatory or exclusionary behavior.

Disparity studies typically include an overview of the legal precedent that influences the key methodologies, computations, and evidence necessary to justify or support existing or proposed contracting programs, including those that are race-conscious. City of Richmond v. J.A. Croson Co.3 (Croson) and Adarand Constructors Inc. v. Peña4 (Adarand) are two seminal legal decisions that established the evidentiary tests necessary to evaluate local, state, and federal race-conscious contracting programs. These cases introduced several key concepts and standards, including:

- Ensuring that disparities in contracting are specific to the relevant geographic and product markets;
- Disparities are evaluated considering only firms that are ready, willing and able to bid on and perform contracts;
- The importance of evidence related to marketplace discrimination to support race-conscious contracting programs; and
- The importance of anecdotal evidence in supporting programs offering remedial relief of discrimination in public contracting.

This report uses the terms "affirmative action programs," "race-based programs," and "race-conscious programs" interchangeably, where the terms imply a government initiated program that specifically includes racial or ethnic preferences in alleviating discriminatory behavior.

City of Richmond v. J.A. Croson Co. (488 US 469 (1989)) and Adarand Constructors Inc. v. Peña (515 US 200 (1995)) are two seminal legal decisions that established the evidentiary tests necessary to evaluate local, state, and federal race-conscious contracting programs.

⁴⁸⁸ US 469 (1989).

⁵¹⁵ US 200 (1995).

There have been a number of additional challenges to existing race-conscious contracting programs. While the constitutionality of programs has been upheld, the legal decisions have often brought forth key issues related to disparity study methodologies and the evidence needed to support an inference of discrimination related to an observed disparity ratio.

In addition to the legal review, disparity studies typically include an overview of the rules, regulations, and ordinances that govern public contracting for a particular agency. This includes the existence of race-conscious programs to alleviate contracting disparities. In order to determine the extent to which disparities exist among MBEs and different racial and ethnic groups, disparity studies compute numerical disparity ratios using agency procurement data, information on winning bidders, and a comprehensive analysis of actual and potential bidders to determine which firms are ready, willing, and able to bid on contracts. Consultants use this information to determine utilization and availability, the two inputs of the disparity ratio calculation. Figure ES-1 shows a simplified illustration of the disparity ratio calculation, where the numerator represents the utilization of MBEs and the denominator shows the availability of MBEs.⁵

⁵ This simplified example assumes uniform contract and firm sizes, such that the disparity ratio would be equivalent whether one considers utilization based on the number of contracts or dollars awarded per contract.

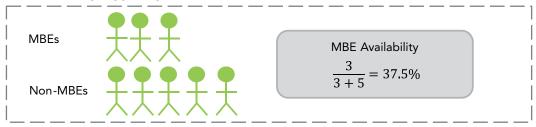
FIGURE ES-1

DISPARITY RATIO COMPUTATION EXAMPLE

UTILIZATION CALCULATION



AVAILABILITY CALCULATION



Disparity Ratio =
$$\frac{Utilization}{Availability} = \frac{25\%}{37.5\%} = 0.67$$

As a general rule of thumb, a disparity ratio of less than 0.80 (or 80 if expressed on a scale that multiplies the disparity index by 100) indicates a substantial disparity.⁶ Utilization and availability are also specific to well defined geographic and product markets (i.e., the "relevant markets"). Market definition is an economic concept that looks to substitutability and is intended to determine who is competing for public contracts along geographic and product lines. Robust and defensible disparity studies have an explicit definition of both geographic and product markets, as these are required in order to determine who is competing for contracts and the extent to which disparities exist among these market definitions.

Given the lack of standardization in evaluating the levels of underutilization, many studies employ the Equal Employment Opportunity Commission's (EEOC) "80 percent rule" in Uniform Guidelines on Employee Selection Procedures. In the context of employment discrimination, an employment disparity ratio below 80 indicates a "substantial disparity" in employment.

DISPARITIES EXIST

The review of selected disparity studies provided 2,385 distinct high-level disparity ratios presented in executive summaries, major findings, and conclusions sections. These ratios include observations for MBEs in the aggregate, as well as for the African American, Hispanic American and Asian American categories. In addition, studies computed disparity ratios based on industry, with the majority reporting disparity ratios for major industry groups such as construction, professional services, architecture and engineering services, and goods and supplies. However, there is no standard disparity ratio reporting method and a review of the disparity studies found wide variation in how disparity authors computed and reported disparity ratios. Some studies included a single disparity ratio covering multiple years, while others reported ratios for every calendar year or fiscal year for the time period under investigation. Furthermore, some studies only reported disparity ratios on prime contracts, while other studies distinguished between prime contracts and subcontracts.

As a result, the disparity ratios are not an "apples to apples" comparison when examining results from one report compared to another. The studies were conducted by different authors, for different agencies, using different product and geographic market definitions and for different time periods. In addition, there are methodological differences in computing disparity ratios among consultants. Nevertheless, the comprehensive nature of the review established a distinct pattern of substantial contracting disparities for MBEs in the aggregate and for different racial and ethnic groups across different industries. 78.2 percent of all disparity ratios drawn from the set of disparity studies were less than 0.8, with a median value of 0.19. Considering that less than 0.8 is a substantial disparity, these results indicate that contracting disparities for MBEs are pervasive.

This does not represent the totality of disparity ratios reported in the 100 studies. In certain cases, disparity study consultants also included Native Americans and Subcontinent Asian Americans, but these instances were relatively few or often contained inadequate data to compute a disparity ratio. In addition, most studies reported disparity ratios for women-owned businesses, although differences existed with respect to approaches separating out Caucasian-owned WBEs versus non-Caucasian owned WBEs. Furthermore, some studies reported an aggregate M/WBE disparity ratio, as opposed to just an MBE disparity ratio. The results presented in this report include the combined M/WBE ratios, but do not include WBE-only disparity ratios. Lastly, many studies provided hundreds of different additional disparity ratios based on smaller geographic regions, combining across industries, looking at different funding sources, or looking at different time periods. In order to minimize double counting, the research findings in this study do not include the subset of disparity ratios based on the multiple iterations that some disparity study consultants performed. The primary purpose of the disparity ratio review was to demonstrate that these studies identified contracting disparities, sufficient to assess causal factors.

Furthermore, many studies tested whether these disparity ratios were statistically significant, where disparity study authors used statistical approaches to test whether the disparity could have arisen due to chance, or some other factor such as discrimination. For those disparity studies that explicitly indicated whether a disparity ratio was statistically significant or not, approximately 65 percent of all disparity ratio observations were classified as statistically significant by the study authors. However, this may be a conservative estimate since some disparity study consultants only reported significance at a highly aggregated level. Lastly, 99 percent of statistically significant disparities identified by study authors were less than 0.8, lending strong support for discriminatory behavior in contracting.

Despite the detail regarding underrepresentation presented in disparity calculations, the existence of a disparity does not on its own support a conclusion of discrimination. Rather, the numerical disparity ratios necessitate additional inquiries to explain why MBEs face significant contracting disparities compared to non-MBEs. In order to determine whether disparities are the result of discrimination, disparity study consultants use both quantitative and qualitative analyses to examine the root causes of disparities in public contracting. Most studies in the research set included an analysis of marketplace discrimination, using regression analysis to investigate disparities in business formation, business earnings, and loan denials between MBEs and non-MBEs in the private sector. These analyses demonstrate the presence of discriminatory behavior in private markets by showing race as a statistically significant predictor of disparities in business owner earnings, business formation and access to capital. As a result, these analyses allow disparity studies to address whether or not public agencies were susceptible to or engaging in passive discrimination in public contracting.

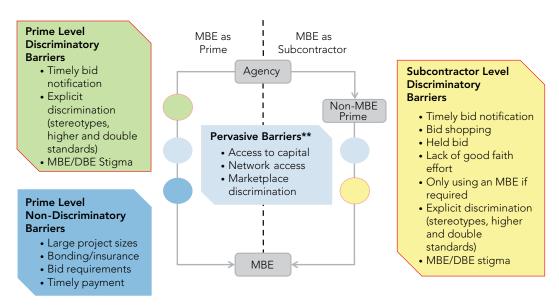
USING ANECDOTAL EVIDENCE TO EXPLORE CONTRACTING BARRIERS AND CAUSES

Anecdotal evidence does not establish the predicate for race-conscious programs, but instead, aids policymakers in evaluating whether a contracting program is needed and narrowly tailored to address demonstrated discriminatory behavior. Anecdotal evidence provides first-hand accounts of barriers in public contracting and instances where discrimination is a factor in MBE underrepresentation. Critics of the validity of anecdotal evidence argue that the accounts may not be sufficiently verified and that instead of

detailing actual accounts of discrimination, the evidence may only present perceptions of discrimination. Yet, legal proceedings have varied on the level of verification needed to support the importance and relevance of anecdotal evidence. In order to address these concerns, the most robust disparity studies will draw on multiple techniques to obtain anecdotal accounts from individuals that have had actual, verifiable experiences in working with a procurement agency. It is through a wide number of reliable sources that disparity studies can include instances of discrimination which are representative of the experiences of multiple minority business owners.

The disparity studies reviewed for this study provided specific, verifiable instances of discrimination which were recorded, cataloged, and analyzed using content analysis. The most robust studies identified barriers, discussed the harm that the improper conduct inflicted on the businesses in question, and examined the extent to which discriminatory exclusion and impaired contracting opportunities are systemic rather than isolated or sporadic. Figure ES-2 summarizes the most frequently cited barriers in the disparity studies.

FIGURE ES-2 MOST FREQUENTLY CITED CONTRACTING BARRIERS FACING MBES



^{**}Access to Capital and Network Access barriers can arise due to both discriminatory and non-discriminatory reasons and also influence non-discriminatory barriers such as bonding and insurance

Discrimination influenced multiple contracting barriers, both from the marketplace, as well as driven by either a contracting agency or non-MBE prime in the context of subcontracting. The barriers identified varied from outright prejudicial treatment and instances of exclusion based on racism, to marketplace barriers erected by systemic discrimination in both the private and public market (e.g., access to capital). Disparity studies with substantial anecdotal evidence supporting the presence of discriminatory barriers provide justification for the use of race-conscious programs in those jurisdictions. In addition, there are multiple non-discriminatory barriers, such as large project sizes, timely payment, and bid requirements that present challenges to potential bidders regardless of the race or ethnicity of the owners. However, the anecdotal evidence indicates that certain systemic discriminatory barriers can influence the perception of exclusionary practices with respect to some non-discriminatory barriers.

Arguably the most difficult barrier to address with respect to discrimination is the exclusionary networks that MBEs encountered in public contracting. On one hand, network exclusion can arise due to normal business operating procedures, often dictated by the desire to work with companies that have prior experience, demonstrated work product, and a solid reputation. Yet, in other instances, discriminatory attitudes of agency personnel and non-MBE primes facilitated excluding MBEs from informal networks that influence learning about and obtaining public contracting opportunities.

The review of existing disparity studies yielded several common themes and insights beyond the characterization of contracting barriers and evidence of discrimination. These included:

- The "needle has not moved" with respect to overcoming disparities. Every study identified significant contracting disparities and many supported these findings with additional quantitative and anecdotal evidence that supported the need for both race-neutral and race-conscious remedial efforts. Yet, over time disparities were prevalent even within the same jurisdiction.
- Disparity studies often reported the same race-neutral remedies (e.g., unbundling large contracts, improving payment processes, improving data collection) and race-conscious remedies (e.g., improved goal setting and monitoring) to address contracting disparities, yet what is missing is the extent to which agencies have actually implemented and measured the success or failure of these recommendations.

 Race-conscious programs typically helped MBEs when enacted; however the legal history has illustrated that these programs need to comply with the strict scrutiny standard and be narrowly tailored.

In addition to common observations, the disparity studies and anecdotal evidence highlighted common problems and issues with contracting disparities experienced by MBEs. These include:

- Enforcement and accountability of race-conscious programs by contracting agencies. There is a perception that prime contractors do not engage in good faith efforts to comply with race-conscious programs and agencies do not monitor or enforce these efforts.⁸
- Resource constraints are a major issue facing contracting agencies. Many suggestions for program improvements, both race-neutral and race-conscious, require a substantial monetary investment (both human capital and infrastructure) at the public agency level. Based on the political and economic environment, some of these recommendations are prohibitive given lack of resources.
- There is often insufficient analysis and evidence of subcontracting activity at the agency level. Given that subcontracting is an important and critical component of increasing MBE participation in public contracting, greater oversight and accountability of subcontracting behavior coupled with better and more reliable data collection should be a priority

The disparity study review indicated that both discriminatory and non-discriminatory actions lead to contracting disparities for MBEs. Additional research is needed to understand what steps public agencies have taken to address these disparities. Specifically, whether agencies have been effective at implementing the common policy prescriptions most disparity studies include and to what extent these policies have either succeeded or failed. Beyond this, there are a number of areas to explore and research with respect to lessening barriers faced by MBEs in public contracting. MBEs, advocacy groups and policy makers should explore new and innovative ways to increase engagement, oversight, enforceability and accountability within the public contracting process. This requires leveraging data sharing and transparency, exploring race-neutral means and the efficacy of these means, and also evaluating what race-conscious methods have been not only defensible, but successful, in alleviating the effects of discrimination.

Numerous disparity studies included anecdotal accounts which touted the belief that without a race-conscious program in place, prime contractors would never use an MBE.

Research Findings

The objective of this report is to provide insight into how the qualitative data and evidence included in disparity studies identifies contracting barriers and discriminatory behavior which lead to the observed contracting disparities for MBEs. The report analyzes the impetus for disparity studies, including the components and methodologies of sound disparity studies. As part of the analysis, the report summarizes existing disparity ratios contained in a select set of disparity studies. Lastly, the report includes an analysis of additional quantitative and qualitative evidence that facilitates an investigation into what causes disparities such that the findings can advance the dialogue into finding effective policy solutions to remediate contracting disparities for MBEs.

A review of 100 disparity studies, reports, and summaries indicated significant contracting disparities for minority business enterprises (MBEs), pervasive across different ethnic and racial groups, industries, and geographies. The disparity results were substantial, with over 78 percent of disparity ratio observations falling below a 0.8 or 80 percent threshold used to classify a "substantial" disparity. In many cases, these disparity ratios were statistically significant at high levels, such that disparity study consultants could reject chance as a prime driver of contracting disparities. However, the presence of significant disparities observed from numerical disparity ratios does not imply discrimination. Instead, disparity studies rely on a wealth of additional information to characterize inferences of discrimination and the need for race-based contracting programs implied by substantial and significant disparities.

Anecdotal data collection and analysis is an essential disparity study component in terms of understanding what discriminatory behaviors are most pervasive. The anecdotal evidence captured in each disparity study reviewed as part of the research design provided the foundation for evaluating contracting barriers, how these barriers arise, and in what context they arise (e.g., discriminatory or non-discriminatory). Key barriers identified in the qualitative data analysis include:

- Barriers arising largely from discriminatory behavior: Agency and prime contractors employing capability stereotypes, double or higher standards, and manipulating bid processes based on prejudicial factors unrelated to business performance; also systemic discrimination against MBEs related to key marketbased issues including access to capital.
- Barriers arising largely from non-discriminatory behavior: Actions that influence all businesses regardless of race or ethnicity, including large project sizes, bid qualifications, and timely payment.
- Barriers related to network access: Exclusion of MBEs from formal or informal networks that would facilitate greater access to public contracting opportunities, although these represent a gray area between discriminatory and nondiscriminatory behavior.

With respect to the last bullet, there is a fine line between claims of discrimination and a general lack of access. MBEs often cited network exclusion as a barrier, but often the reasons why were split between claims of discrimination versus understanding that most businesses prefer to work with firms they know and trust, regardless of race or ethnicity.

The review of existing disparity studies yielded several common themes and insights beyond the characterization of contracting barriers and evidence of discrimination. These included:

The "needle has not moved" with respect to overcoming disparities. Every study identified contracting disparities and many supported these findings with additional quantitative and anecdotal evidence that emphasized the need for both race-neutral and race-conscious remedial efforts. Yet over time, disparities were prevalent even within the same jurisdiction.9

For example, the Washington Suburban Sanitary Commission commissioned disparity studies in 1999, 2005, 2010 and 2015. Although the 2015 study has yet to be published, the first three studies indicated that substantial disparities continued to exist for many racial and ethnic groups. While the 2005 study noted improvement over the 1999 study, the disparity consultants, which were different for each of the first three studies, often recommended similar approaches to addressing disparities. Likewise, disparity studies conducted in 2007 and 2012 for the California Department of Transportation (Caltrans) both contained substantial statistically significant disparities for specific racial and ethnic groups. As a result, Caltrans still failed to meet DBE goals. What remains unclear and a major policy issue is to what extent Caltrans implemented recommendations provided in the 2007 disparity study that might provide insight into why continued disparity observations existed in 2012.

- Disparity studies often reported the same race-neutral remedies (e.g., unbundling large contracts, improving payment processes, improving data collection) and race-conscious remedies (e.g., improved goal setting and monitoring) to address contracting disparities, yet the studies fail to detail the extent to which agencies have actually implemented and measured the success or failure of these recommendations.
- Race-conscious programs typically helped MBEs when enacted; however the legal history has illustrated that these programs need to comply with the strict scrutiny standard and be narrowly tailored.

In addition to common observations, the disparity studies and anecdotal evidence highlighted common problems and issues with contracting disparities experienced by MBEs. These include:

- Enforcement and accountability of race-conscious programs by contracting agencies. There is a perception among some MBEs that prime contractors do not engage in good faith efforts to comply with race-conscious programs and agencies do not monitor or enforce these efforts.¹⁰
- Resource constraints are a major issue facing contracting agencies. Many
 suggestions for program improvements, both race-neutral and race-conscious,
 require a substantial monetary investment (both human capital and infrastructure)
 at the public agency level. Based on the political and economic environment,
 some of these recommendations are prohibitive given lack of resources.
- There is often insufficient analysis and evidence of subcontracting activity at the
 agency level. Given that subcontracting is an important and critical component
 of increasing MBE participation in public contracting, greater oversight and
 accountability of subcontracting behavior coupled with better and more reliable
 data collection should be a priority.

These three bullet points also raise an important question for future research. Do disparity studies and conclusions provide insight into how governments are doing with respect to rectifying disparities? A logical next step in the research process is to investigate what is (and is not) being done to help address the causal factors of contracting disparities, including the role or influence of discrimination against MBEs.

¹⁰ Numerous disparity studies included anecdotal accounts which touted the belief that without a race-conscious program in place, prime contractors would never use an MBE.

THERE IS A NEED FOR INNOVATIVE POLICIES

The disparity study review indicated that both discriminatory and non-discriminatory actions lead to contracting disparities for MBEs. Additional research is needed to understand what steps public agencies have taken to address these disparities. Specifically, whether agencies have been effective at implementing the common policy prescriptions that most disparity studies include and to what extent these policies have either succeeded or failed. Beyond this, there are a number of areas to explore and research with respect to lessening barriers faced by MBEs in public contracting. Suggestions include, but are not limited to:

- Developing a uniform approach to determining the capacity of firms. A holistic
 definition could consider key individuals, equipment, financing, technology,
 and the availability to compete, among other factors. This can alleviate
 disagreements of which firms are available in a particular geographic and
 product market.
- An analysis of how often disputes are brought against municipalities/agencies
 could be a useful tool to help agencies and policymakers evaluate the current
 state of public contracting for minorities. Key issues include what is the cost
 of these actions and who pays? What level of resources is being dedicated to
 defend the program that could be used to improve the program?
- Research into the real ramifications for a firm that engages in discriminatory
 behavior and is caught. How do different municipalities and agencies deal with
 this scenario? A large-scale survey and interview effort could offer clarity and
 assist in developing policies that will deter firms from engaging in discriminatory
 behavior by dis-incentivizing it.
- To reduce informational asymmetries resulting from established and often
 exclusive networks, governments can create a centralized bidding notification
 hub for all city/related agencies where bid posting is mandatory. This will ensure
 equal access to information as well as timely and equal notification.
- The federal government should be a model for state and local governments in addressing and understanding the public contracting process. To what extent can new technology or innovative tools be used to educate and inform government contracting officers with respect to barriers faced by MBEs?
 Would these tools be transferable to local contracting agencies? Can tools be

developed at a federal level to help standardize and assist all agencies in the collection and management of procurement data at the prime and subcontractor level? Organizations like the MBDA can push for ways to standardize data collection procedures and elements. This will be a long process but one that will ultimately result in greater information and better-informed policies to affect change.

- Little work exists to understand the economic impact of discrimination in public contracting for MBEs. A study that demonstrates the value of these firms to the agencies and communities in which they work is necessary to drive home the business case for affirmative-action programs that remedy existing contracting disparities.
- Agencies such as the MBDA could host and sponsor working groups of leading disparity study professionals to discuss and contrast the merits and difficulties of current disparity study methodologies, particularly with respect to the issue of defining both "availability" and "ready, willing, and able" firms.
- Agencies can generate disparity study fact sheets and distribute them to buyers
 and office staff. This allows staff to see exactly what issues the disparity study
 identified with respect to discrimination and should advance the discussion
 towards finding solutions. An ongoing education process could focus on
 understanding specific problems and using teamwork to solve them. It could
 also encourage buy-in across the organization by starting with a thorough
 understanding of the problem.
- Certifying organizations could offer different levels of certifications and certify,
 for example, that a firm can do a specific type of work at a specific dollar amount.
 This would reduce the risk to municipalities and states, and would remove the
 rationale for disparities that capacity is the main issue.
- Contractors who did not win a bid require objective and accurate feedback to
 improve in subsequent bidding opportunities. Although not cited as a major
 barrier, multiple minority business owners reported that they lack feedback
 on failed proposals. Because most proposals contain evaluation criteria in
 the performance work statement, government agencies should provide the
 information on firm and proposal ratings to contractors who did not win in an
 effort to correct their mistakes in their next proposal to increase their chances
 of winning.

- States and municipalities should evaluate the feasibility and implementation of completely anonymous incident reporting systems. Staff members involved in issues should be apprised of the situation and if found that they contributed to the problem, should face monitored corrective action or other sanctions.
- A study that examines the economic impact of discrimination in public contracting could help quantify lost revenue and the impact on communities. This study could help organizations like the MBDA and the Department of Justice (DOJ) to create a centralized data system going forward where state and municipality data flows in, collecting anecdotal information, incident reports, payment speed, etc. The data would be publicly available and would permit the MBDA and the DOJ to proactively develop and run well-informed initiatives to alleviate discriminatory behavior that causes disparities in public contracting.

APPFNDIX A

List of Disparity Studies

(CHRONOLOGICAL)

- "2015-16 State of Indiana Disparity Study", BBC Research & Consulting, 3/2016. (Indiana)
- "Disadvantaged Business Enterprise Availability, Utilization, and Disparity Study for the San Francisco Municipal Transportation Agency (SFMTA)", Rosales Business Partners LLC, 11/2015. (San Francisco, California)
- "Minority- and Women-owned Business Enterprise (M/WBE) Program Disparity Study", MGT of America, 10/2015. (San Antonio, Texas)
- "Minority- and Women-owned Business Enterprise (M/WBE) Program Disparity Study", MGT of America, 10/2015. (San Antonio, Texas)
- "Minority- and Women-owned Business Enterprise (M/WBE) Program Disparity Study", MGT of America, 10/2015. (San Antonio, Texas)
- "Broward County Public Schools Disparity Study", Mason Tillman Associates, 10/2015. (Broward County, Florida)
- "City of Atlanta 2015 Disparity Study Report", Keen Independent Research, 10/2015.
 (Atlanta, Georgia)
- "City of Atlanta 2015 Disparity Study Report", Keen Independent Research, 10/2015. (Atlanta, Georgia)
- "City of Philadelphia Fiscal Year 2014 Annual Disparity Study", Econsult Corporation, 8/2015.
 (Philadelphia, Pennsylvania)
- "City of Cincinnati Disparity Study", Mason Tillman Associates, 7/2015. (Cincinnati, Ohio)
- "Arizona Department of Transportation Disparity Study Report", Keen Independent Research, 7/2015. (Arizona)
- "City of St. Louis Disparity Study", Mason Tillman Associates, 4/2015. (St. Louis, Missouri)
- "Durham County/City of Durham, North Carolina Multi-Jurisdictional Disparity Study", Griffin & Strong, P.C., 1/2015. (Durham, North Carolina)
- "Disparity Study for Denver Public Schools", MGT of America, 10/2014. (Denver, Colorado)

- "State of Missouri Office of Administration Disparity Study", Colette Holt & Associates, 10/2014. (Missouri)
- "North Carolina Department of Transportation Disparity Study, 2014", Colette Holt & Associates, 7/2014. (North Carolina)
- "City of Philadelphia Fiscal Year 2013 Annual Disparity Study", Econsult Corporation, 6/2014.
 (Philadelphia, Pennsylvania)
- "Connecticut Disparity Study: Phase 2", The Connecticut Academy of Science and Engineering, 5/2014. (Connecticut)
- "2014 San Diego Association of Governments Disparity Study", BBC Research & Consulting,
 5/2014. (San Diego, California)
- "City of Mobile Disparity Study 2010-2012", Speeches ETC., 2/2014. (Mobile, Alabama)
- "Nevada Department of Transportation Disparity Study Final Report", Keen Independent Research, 12/2013. (Nevada)
- "Connecticut Disparity Study: Phase 1", The Connecticut Academy of Science and Engineering, 8/2013. (Connecticut)
- "Jacksonville Multi-Jurisdictional Disparity Study Volume 1", Mason Tillman Associates, 8/2013. (Jacksonville, Florida)
- "Disadvantaged Business Enterprise Disparity Study: Volume 1", NERA Economic Consulting, 7/2013. (Maryland)
- "Disadvantaged Business Enterprise Disparity Study: Volume 1", NERA Economic Consulting, 7/2013. (Maryland)
- "Disadvantaged Business Enterprise Disparity Study: Volume 1", NERA Economic Consulting, 7/2013. (Maryland)
- "City and County of Denver: Minority/Women Owned/Disadvantaged Business Enterprise Disparity Study", MGT of America, 7/2013. (Denver, Colorado)
- "2012 Disadvantaged Business Enterprise (DBE) Program Disparity Study Update",
 Mason Tillman Associates, 3/2013. (Los Angeles County, California)
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